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ABSTRACT

This document contains reports on the structures of qualification levels in Germany, Spain, France, the Netherlands, and the United Kingdom that were commissioned during a study to identify trends and developments in the European Union related to national certification frameworks. Each country report examines the following topics: the history of the development of the country's classification system; the definition of standards applied by the country; and the procedures for developing and approving the country's standards and the number and definitions of levels used in the system. In addition, the country's national system for certifying qualifications is examined in depth through case studies of the building and health care sectors. Finally, the similarities and differences between the national system and the European five-level training structure are described

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along with the extent to which the five-level training structure is still applied in the country. The following are among the items appended to the individual country reports: (1) a detailed description of the system of vocational qualifications of Spain's Basque Institute for Qualifications; (2) a list of specialization groups in 17 occupational categories in France; (3) an overview of the Netherlands' national certification bodies; and (4) a list of the United Kingdom's national training organizations. (MN)

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European Structures of Qualification Levels

Reports on recent developments in Germany, Spain, France, the Netherlands and in the United Kingdom (England and Wales)

Volume II

Anneke Westerhuis

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Preface

In all European Member States and highly industrialised countries the structure of the labour force and of the work organisation is continuously changing. Technological, economic, social and educational developments, the need for flexibility and more active and creative multi-skilled workers as well as the reduction in the number of hierarchical levels in companies, strongly influence this structure of the labour force. Education and training systems are challenged by these developments. They are invited to contribute to the creation of employment and jobs pro-actively, to the restructuring of the work organisation, to reconsiders the structure of qualification levels, etceteras. How precisely do these systems respond to structural changes in the labour force and work organisations? How do education and training systems take into account or contribute to these structural economic changes? More particularly, how do national systems for classifying qualification levels respond to these changes in terms of the number and definition of levels, types and character of qualifications?

In 1997 UNESCO made an effort to revise the International Standard Classification of Educational provisions (ISCED). ISCED had been designed as an instrument suitable for assembling, compiling and presenting statistics of education, both within countries and internationally. The revision, undertaken by UNESCO in close cooperation with OECD and Eurostat lead to a revision of ISCED, approved in 1998. The renewed classification tried to get the balance right between educational provisions and VET-provisions ([1]). For this reason, Cedefop and Eurostat developed a Fields of vocational training structure, basically an economic sector based classification of training programmes ([2]).

In the meantime Cedefop emphasised the need for a re-assessment of the 1985 EU five-level structure of training and qualification levels (see Appendix 1):

(1) Does the European Community's five-level structure, which was retained by the Council in 1985 in terms of number and definitions of levels, characteristics and definition of these levels, deliver sufficient criteria for classification?

(2) Does the system reflect the present and future developments in education/training, in employment and the changing work organisations and does it permit a cross-country or even a European wide comparison and the observing of current and future trends?

(3) In the light of socio-economic changes and new challenges for education policy (life long learning) it may well be that stake holders, policy-makers, social partners and educationalists in the Member States increasingly question the European five-level

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([1]) OECD: *Classifying Educational Programmes, Manual for ISCED-97 Implementation in OECD Countries*, Paris, 1999, see also Appendix 3

([2]) *Fields of Training (Manual)*, Cedefop and Eurostat, Thessaloniki, Luxembourg 1999

structure. The question is whether and how far this 1985 five-level structure is still responding to these needs and whether this structure should be adapted to the changes, which have come up the last 15 years?

To prepare and feed this policy debate and in response to Cedefop's own work programme, this study was launched during the 1998 plenary meeting of the CIRETOQ, Cedefop's Network for Research Cooperation on Trends in Occupations and Qualifications (Thessaloniki, 15 and 16 June 1998).

It was agreed that an in-depth study of five National Vocational Education and Training Structures should cover three fields:

- An analysis of the characteristics of National Qualification Frameworks (number and definition of levels, definition of qualifications, criteria for classification, procedures for updating qualifications);
- An analysis of the similarities and differences between the National Frameworks and the 1985 European five-level structure;
- An assessment of whether the European structure of qualification levels is being applied in the respective EU Member States and if yes how and to what extend.

The study identifies trends and developments in some important Member States concerning national frameworks and their role in education/training and labour market developments. By doing so, this study will feed the debate of whether and how far an update of the European five-level structure is relevant. It will support the decision making process on the future of a European reference framework for training and qualification levels.

The study was conducted on behalf of Cedefop by CINOP (the Dutch Centre for the Innovation of Education and Training), by Joop Nafzger and Anneke Westerhuis, the latter ensured the technical-scientific co-ordination and the editing of the synthesis report published by Cedefop as volume 1. The work was performed in co-operation with BIBB (the German Federal Institute for Vocational Training), Richard Koch and Jochen Reuling; The Technical University of Berlin (Institute for VET and Further Education), Günter Heitmann; Fundación CIREM (the Spanish Foundation Centre for European Initiatives and Research in the Mediterranean), Joan-Anton Bruna; CEREQ (the French Centre for Study and Research on Qualifications), Annie Bouder, Jean-Louis Kirsch and Thomas Couppié; and QCA (the Qualifications and Curriculum Authority for England and Wales), Tim Oates.

The study covers five countries/European regions: England & Wales, France, Germany, The Netherlands and Spain. The contributions on country specific developments and outcomes are published in this volume 2 by Cedefop. They present a thorough introduction into recent developments, discuss the perception of some problems linked to standards, qualifications and classifications in their country and form the technical basis for this synthesis report. A

separate report was written on qualification level developments in tertiary education, which will be published as volume 3. We are thanking the authors and the participating institutes for their work done on behalf of Cedefop/Thessaloniki.

Stavros Stavrou, Deputy Director

Burkart Sellin, Project Co-ordinator

Introduction

Definitions of concepts

One of the first questions that must be answered when analysing and comparing classification systems is which framework(s) of each country ought to be included in the study. The definition and scope of Classification Frameworks varies strongly in the EU Member States. What exactly is classified in a framework? How strong for example is the respective qualification framework linked to educational standards and the respective education and training system.

As far as England and Wales are concerned, the Government - following the Dearing Review of Qualifications for 16-19 Years Olds, introduced a national framework covering general secondary education, vocational education and training, post-initial training, work based learning and prior learning (1998). Spain is working towards the introduction of such a comprehensive classification framework, while in France the introduction of an all-encompassing framework is proposed to Parliament. Germany, on the other hand, does not have a comprehensive classification framework and is not working on one either. Germany identifies five types of vocational education: (i) education for the so-called recognised VET-occupations (*staatlich anerkannte Ausbildungsberufe*), (ii) full-time and school-based programmes for the so-called educational occupations (*Schul-* or *Fachschulberufe*), (iii) National and (iv) Federal State regulated education occupations (*Weiterbildungsberufe*) and (v) tertiary education programmes (*Fach-* and *Hochschulberufe*). All together these education categories might be regarded as an implicit framework of qualification levels.

The position of the Netherlands is somewhere in between England and Germany. It identifies two qualification frameworks. A formalised structure covering secondary vocational education programmes and an implicit structure for higher professional education, being a part of 'higher education' (*hoger onderwijs*). As in England, the aim is to use the secondary vocational qualification standards for the assessment of prior learning and for continuous vocational training provisions as well. Both systems have their own procedures for developing standards and qualifications.

In France the current standards of the Ministry of Education are the most traditional ways of delivering a qualification. They are organised (classified) within an architecture of levels and fields, which have a strong influence on other classification systems, either inside or outside of the educational system. For instance, in Spain a forthcoming reform is on its way. A bill is presented to the National assembly, proposing to set up a cohesive, comprehensive system in form of a national catalogue of vocational certifications. The present three systems – the state certifications, the accredited ones (*titres homologués*) and the vocational qualification certificates (*Certificats de Qualifications Professionelles, CQP*) – will be given the opportunity to be registered in this national catalogue. A national commission for vocational

qualifications will be in charge of the management of the system. It will be given the task to set up a new system of qualification levels as well.

To simplify matters in this wide variety of systems, we applied two criteria for the selection of frameworks for classifying qualifications to be studied:

- The focus lies on systems incorporating qualifications that are (also) used to award the results (and the achieved goals) of a recognised vocational education on the national level.
- Within vocational education the focus lies on all levels identified in vocational education: from pre-vocational training and crafts training to technical and higher vocational education including university type education.

When analysing and comparing classification frameworks, it is important that a number of concepts are accurately defined. The following definitions are used for this report. A *Standard* defines the outcome of a learning or prior learning/experience process. A Standard reflects what the (future) employee/professional must know and be able to apply in professional practice, which are laid down in documents and are recognised by public authorities and/or social partners. Standards can be stipulated in awards, exit qualifications, certificates, diplomas or other evidence of a study programme. This is the case in Spain, France, Germany and the Netherlands). Standards can also be geared to assessing someone's work or practical experience (England) ([3]).

A *Unit* is defined as one of a series of components (modules) of a course of training programme that entitle the person in question to a certificate provided these are formally recognised by competent bodies. While modules might be defined by schools or training providers to structure a particular course, units are formally recognised and awarded components.

A *Qualification* is defined as a formal recognition of a standard or a set of standards expressed by a certificate, diploma or other evidence. It is delivered when it has been made clear through an assessment process that standards are achieved. A qualification indicates a person acquired a certificate, either through work experience or after having successfully completed a course or programme, entitling this person to obtain a diploma or some other form of official recognition, either in view of the labour market or of further education.

([3]) It should be noted that the word *Standard* might be interpreted slightly different in the various countries. In England& Wales and in the Netherlands a standard is regarded as a statement concerning a specific competence. In France and Spain a standard is rather regarded as a comprehensive set of competencies. This difference should be noted while reading this report.

Research method and approach

The research was undertaken in three phases. In the first phase the national classification frameworks were identified using a common format (see Appendix 2). The format focused on the history of the development of the frameworks, the definition of standards as applied by each country, the procedures for developing and approving the standards and the number and definition of/for the levels used in the system. The national systems were studied in greater detail in two case studies. Two sectors were selected for these case studies: the building sector and the health care sector. Except for shedding light on the problematic use of level criteria in England & Wales and the Netherlands the case studies provided no relevant information for the three fields to be covered in the synthesis report. Therefore there are no specific references to these case studies in this report.

In addition, the similarities and differences between the national system and the European five-level training structure were described as well as the extent to which this almost 20-year old classification system is still applied in the various countries. ISCED-97 served as an additional frame of reference (*).

This first phase resulted in seven reports: six national studies (Germany (two studies), France, Spain, England & Wales and the Netherlands) and a study on qualification level developments in tertiary education.

In the second phase, the similarities and differences between the national structures and classification systems were analysed at a two-day conference, during which the aspects below were given particular attention:

(1) The number and description of levels in the respective frameworks for the classification of qualifications and the implicit and/or explicit criteria used for the definition of levels and their characteristics.

(2) The description of pathways by which a person can acquire a qualification.

(3) The position of standards within the continuum of vocational education provisions on the one hand and within employment and occupational hierarchies on the other. They could be formulated in occupational or educational terms as well as in view of its relevance for the entrance in certain job or professional positions.

(4) The mechanisms and procedures for the development of standards, new occupations and professions formulated as training objectives.

(5) The implicit and explicit criteria used for the definition of units and qualifications.

(*) International Standard Classification of Education 1997, UNESCO, Paris, 1997; Classifying Educational Programmes, Manual for ISCED-97 Implementation in OECD Countries, OECD, Paris, 1999.

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I. Germany

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Part I

1. Structure and logics of classification systems for vocational qualifications in Germany

Germany has no comprehensive classification system for vocational qualifications. Not only do independent classification systems exist for the various qualification levels (initial training, advanced training), but different criteria also apply for classification purposes in different education and training sectors at those levels (vocational colleges, training companies) and to some extent even within those individual education and training sectors. It is generally true to claim that both input and output criteria are used to describe vocational qualifications, though the criteria mix applied differs from one qualification to another.

In order to bring transparency to the German classification systems, the following makes use of the criteria of the International Standard Classification of Education (ISCED). Under this classification, initial vocational qualifications which have been obtained within the framework of a dual-system traineeship or a full-time vocational college education are attributed to the upper secondary level (ISCED 3). The qualifications referred to here as advanced vocational qualifications (1) are attributed to the post-secondary level below or outside the level of tertiary education (ISCED 4) (2). The qualifications awarded on completion of a sandwich-type vocational education at a *Berufsakademie* or on completion of a course at a specialised or general institute of higher education (*Fachhochschule*, university) are attributed to the tertiary education levels (ISCED 5 and 6 respectively). This report covers only training which is geared to acquiring knowledge and skills to ISCED levels 3 and 4 and which leads to a vocational qualification saleable on the labour market. A classification of the main qualifications at these levels is provided below.

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(1) Differing to this classification initial and advanced qualifications have been classified to level III and IV resp. Level IV and V of ISCED-97 after completion of this report (OECD 1999).

(2) The terms 'advanced vocational training' and 'advanced vocational qualification' are understood in the following to denote training programmes and qualifications regulated by the Federal Government or the *Länder* governments of a standard higher than that of an initial vocational training or qualification.

Scheme 1: Classification of the main initial and advanced vocational qualifications

	Qualifications regulated at federal (national) level	Qualifications regulated by the *Länder* (federal states)	Qualifications regulated at chamber level
ISCED level 3	State-recognised traineeship qualifications Qualifications in the health care sector	assistant qualifications (particularly in the services sector and for technical functions in scientific fields) Qualifications in the health care and social services sector	
ISCED level 4	*Meister* qualification in the crafts, agriculture, institutional management or industry Certified ... (e.g. *Fachwirt* in industry, social counsellor)	State-certified (*Techniker*, *Betriebswirt* or *Gestalter* in conjunction with a specialism) Advanced vocational qualifications in the health care and social services sector	e.g. *Fachwirt* in banking, programmer, restoration mason, etc.

In their fundamental orientation, classifications of initial and advanced vocational qualifications focus on the state-recognised traineeships of the dual system. These account for the numerically largest group of vocational training qualifications in Germany. The training is delivered for the main part on the company premises and to a lesser degree at a part-time vocational college. It may be supplemented by training periods at a central training venue.

The 1969 Vocational Training Act conferred responsibility for regulating these qualifications to the Federal Government. The competent federal ministry, acting in consultation with the Federal Ministry of Education and Research, issues training regulations in the form of statutory instruments to serve as the basis for orderly and uniform initial vocational training and its adaptation to current and future technological, economic and societal needs. Recognition and regulation of traineeships hinges primarily on the content of the respective vocational training programme and the associated examination. The content entails a broad basic vocational training, specialised training and the acquisition of occupational experience. It is geared on the one hand to broadly defined qualification requirements for skilled labour, for example within a particular sector, but on the other should be sufficiently specific to a given activity that young people completing a traineeship are deployably competent and well prepared for entering the labour market. The training content specified represents a minimum standard with which the employer must under all circumstances comply. The employer can, however, introduce operation-specific priorities in the content provided these exceed this

minimum standard. The skeleton curricula governing the instruction at vocational colleges are geared to the latters' educational mandate of preparing young people for working life and adult society. These curricula are co-ordinated with the training regulations in terms of both content and time scheduling.

The examination is held at the end of the training and takes place before an examination board appointed by the competent agency (usually a chamber of commerce and industry or a chamber of crafts). It covers the in-company training and the occupation-specific component of the instruction at vocational college. The standard aimed for on completion of training is defined as "competence for autonomous action within one's occupational environment", a concept which has to be interpreted in each case in conjunction with the concrete requirements of the employment system.

A dual-system traineeship is open to all young people leaving lower secondary education (secondary level 1). The training normally lasts between three and three-and-a-half years but can be shortened to reflect the individual's previous educational achievement record or performance during the training. Notwithstanding the differences in the training content for different occupations, the final qualifying standard is regarded as formally equivalent for all skilled occupations. A reinforcing factor here is that the qualification itself plus subsequent relevant occupational experience counts as the basic eligibility condition for more advanced vocational training at a later stage.

Employers are only allowed to train young people for these state-recognised traineeship occupations. Consequently, whenever a training regulation is updated, a compromise must be found which reconciles macrosocial, macroeconomic and microeconomic interests with a view to ensuring that the training is both high-quality and up-to-date. The process for producing training regulations is therefore governed by the principle of consensus (between employers' federations, trade unions and the Federal Government). This is supplemented by the principle of cooperation, which governs the co-ordination work carried out by the Federal Government and the governments of the *Länder* (federal states).

Also rated at level 3 of the ISCED classification are the so-called "college qualifications". These are fully-fledged qualifications which are obtained at full-time vocational colleges *(Berufsfachschulen)* on completion of a two-year or longer course. The courses prepare students for so-called "assistant" occupations in the technical and commercial sectors. The initial training which prepares students for occupations in the health care and social services sector, likewise provided at full-time vocational colleges, has a special status within the German education and training system and is therefore not addressed here (see the case study in this report).

The qualifications obtained from full-time vocational colleges are regulated by education legislation and regulations adopted by the *Länder*, though these individual states gear their regulatory actions to skeleton agreements reached within the framework of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany (KMK). Apart from the duration of the training, the main subjects for regulation are

the content of the instruction and examination standards and procedures. This approach makes for a certain degree of uniformity among qualifications obtained in different federal states, though individual states can rearrange priorities provided they remain within the agreed framework.

Although instruction at full-time vocational colleges is geared to developing genuine occupational competence, it can be assumed that the qualification obtained is more a "starter" qualification when compared with that from a dual-system traineeship. The reasons are firstly that the courses are only two-year courses and secondly that the emphasis is on developing occupational knowledge and general practical skills. And although periods of in-company practical training are mandatory, the genuine occupation competence aspired to is probably not really acquired until the ex-student is in employment. Nevertheless this qualification does allow for flexible access to further training within the general education and vocational training system. No formal procedures exist for involving employers' federations or trade unions in the process of devising the training programmes for these so-called "assistant" occupations.

An explicit distinction is made between initial vocational qualifications (ISCED 3) and advanced vocational qualifications (ISCED 4). Federal and state legal provisions accordingly stipulate that advanced qualifications must be so regulated as to make them clearly distinct from the respective initial qualification. The higher level of the advanced qualification is also emphasised by the fact that the input criteria here include a recognised initial qualification and several years of relevant occupational experience.

The advanced vocational qualifications known as *Meister* and *Fachwirt* are regulated by the Vocational Training Act (BBiG) which characteristically provides that regulatory constraints in these cases should concern only the examination requirements. How the candidate acquires the corresponding knowledge and skills is up to the candidate himself. Often however, recommendations are issued on the running of preparatory courses, though the duration of such courses varies substantially from one industry to another. The focus in developing the *Meister* and *Fachwirt* qualifications is on certifying occupational competence to hold intermediate management positions. In this respect a major role is naturally played by informal learning processes which took place during the mandatory period of relevant occupational experience, and these have to be taken into account when evaluating the appropriate duration of the corresponding courses. But because of the practical emphasis of these advanced vocational qualifications (in contrast to the subject-based structure of college-based courses), the qualifications do not confer any entitlement to direct access to the university and near-equivalent sector of tertiary education. Such access is governed by the admission conditions laid down by the *Länder* governments or the individual higher education establishments themselves. The work of devising these advanced vocational qualifications entails a formalised procedure which involves the Federal Government, the employers' federations and the trade unions, each represented on an equal footing.

The college-based advanced vocational qualifications known as *Techniker, Betriebswirt* and *Gestalter*, which are regulated at *Länder* level, can be obtained from specialised vocational colleges. The courses last two years in full-time format or correspondingly longer in part-time

format. As in the case of the likewise *Länder*-regulated ISCED level 3 qualifications, the Standing Conference of Ministers of Education of the Federal States (KMK) endeavours to ensure uniformity by means of framework agreements, for example on admission conditions, compulsory fields of learning and the requirements and procedures to govern the final examination. These agreed criteria are then further detailed by the individual states. As in the case of other qualifications obtained at specialised vocational colleges, the structure of the curriculum is geared less to practical competence than to the systematics of the various subjects covered and to developing a deeper understanding of occupational knowledge. However, as the students on these courses have already accumulated some occupational experience, these qualifications are well able to compete with those of *Meister* and *Fachwirt* on the labour market. Moreover, these qualifications also permit access to shortened courses at specialised colleges at upper secondary level from which the successful graduate leaves with an entitlement to access to higher education in his/her specialism. As is typical of educational qualifications regulated by the *Länder*, the process whereby such qualifications are devised entails no formal procedure for involving employers' federations or trade unions.

Finally, there are also the advanced training qualifications which are regulated at chamber level. The Vocational Training Act, in § 46.1, makes provision for individual chambers to hold examinations and in that connection to regulate the content, goal, requirements, procedures and admission conditions. In some cases significant differences can be observed here even between qualifications for similar disciplines. Under the provisions of § 46.2, these chamber-regulated qualifications can be converted into qualifications with nationwide recognition, e.g. the *Meister* or *Fachwirt* qualification, provided that they are of supraregional relevance and such conversion is declared necessary by the social partners. However, many of these chamber-regulated qualifications have shortcomings in terms of the criteria of uniformity and institutional permeability. As a result they cannot be unambiguously equated with the advanced training qualifications which are regulated at federal or *Länder* level. An agreement was reached between the social partners in 1996 to the effect that they would seek nationwide co-ordination in regulating these qualifications and, if deemed necessary, would convert them into nationally uniform qualifications.

Part II

2. Observations on the history of classification systems in Germany

The baseline for classifying initial and advanced vocational training is the state-recognised traineeship qualification within the dual system. The construct known as the traineeship occupation has its roots in the mediaeval tradition of training in craftsmanship. This tradition acknowledged graduated qualification levels as are still customary today in the craft sector, namely from apprentice to journeyman to master. The demarcation of traineeship - or apprenticeship - qualifications within the craft sector corresponds with the demarcation of trades laid down in the Craft Regulation Code. The beginning of the 20th century saw the emergence of a separate system of vocational training for the industrial sector. Skilled workers and skilled employees differ from semi-skilled and unskilled workers by the fact that they have normally completed a three- to three-and-a-half-year training. The procedures and basic structures of the in-company training typical of the craft sector are regulated by the Craft Regulation Code; the corresponding provisions for initial vocational training in the industrial and service sectors are regulated by the Vocational Training Act. The provisions of each statutory instrument on training, however, are largely identical.

Until 1969 the training ordinances governing the in-company component of a dual-system training in the various sectors of the economy were developed by collective bodies of employers and promulgated by the Minister of Economics. Hearings were arranged for the trade unions on the matter without there having been any formal obligation to that effect. There was no provision for co-ordination with the curricula being taught at vocational colleges. The 1969 Vocational Training Act made the regulation of vocational traineeships a task incumbent on the Federal Government. Responsibility for updating traineeships has since rested with the competent federal minister, who issues training regulations in the form of statutory instruments after reaching agreement with the Federal Ministry of Education and Research. Commencement of work on this henceforth national or federal task was taken as the occasion for involving the trade unions and employers' federations with equal rights in the process. A further innovation was the institutionalisation of co-ordination procedures to ensure consistency between the training ordinances governing in-company training on the one hand and the skeleton curricula governing the college-based instruction on the other.

The examinations for the Meister qualification are likewise regulated by statute through the Craft Regulation Code. Regulation of the advanced vocational qualifications in the craft sector which are outside the range of the Meister qualification was for a long time regarded as an exclusive domain for the regional chambers. The 1969 Vocational Training Act made provision for the chambers to continue their regulatory function but additionally conceded to the Federal Government the possibility of issuing regulations on advanced vocational training on a uniform, nationwide basis. The business community initially responded somewhat negatively to the concept of federal regulation in the advanced training sector. For that reason

the efforts made in particular by the trade unions to secure uniform regulations for occupations of supraregional significance brought only gradual change in the direction of the conditions already prevailing in the craft sector.

The 1969 Vocational Training Act and the corresponding amendment of the Craft Regulation Code created a uniform legal framework for federal regulation of qualifications in the in-company initial and advanced vocational training sector. In order to ensure a certain uniformity within the 16 federal states, the Standing Conference of Ministers of Education (KMK) adopted various framework agreements on the qualifications awarded on completion of college-based initial and advanced training courses.

3. Standardisation of initial and advanced vocational qualifications

3.1 Qualifications for state-recognised traineeship occupations

In numerical terms the qualification for a state-recognised traineeship occupation is the most important within Germany's initial vocational training system. The training is termed as "dual", i.e. it takes place at two learning venues: for the main part within a company and for the lesser part at a (part-time) vocational college. The in-company training may be supplemented by periods spent in a central training venue catering for trainees from different companies.

The content of state-recognised traineeships is regulated in training regulations (on the following see in particular Adler/Benner 1995, Benner 1995). Under the provisions of § 25.2 of the Vocational Training Act, a training regulation must specify at least the following:

the designation of the traineeship occupation,

the duration of the training: minimum of 2 years and maximum of 3 to 3½ years; about 95 % of trainees undergo a traineeship lasting 3 to 3½ years,

the profile of the traineeship: the knowledge and skills to be developed during the training,

the training schedule: guidance on the makeup of the training content and the time to be spent thereon,

the examination requirements.

The skeleton curricula for the supplementary instruction at vocational college lay down (see KMK 1997a):

(a) the (recently revised) educational mandate for vocational colleges: the development of so-called "competence for autonomous action within one's occupational environment" which embraces occupational competence, human (personal) competence and social competence,

(b) didactic principles: the goals are to be determined and the content selected with reference to the occupation concerned; the instruction is to be action-oriented,

(c) occupation-related preliminary remarks: indications on co-ordinating the skeleton curriculum with the training ordinance for the corresponding occupation or, in the event that the first year of training relates to an entire occupational field, with the ordinance for that occupational field,

(d) fields of learning: a list of the fields of learning together with guidelines for the time to be spent thereon in each year of training.

The occupation-related instruction at vocational college normally amounts to eight hours per week, the basis being a total of 880 hours spread over three college years each with a maximum of 40 weeks of instruction. Vocational colleges also provide instruction in general subjects, namely German, social science, sport and in some cases religion and foreign languages, each federal state having the powers to make special provisions in this respect. Altogether the instruction at vocational college normally amounts to 12 hours per week, though special additional courses may increase that figure.

The criteria for recognising and de-recognising traineeship occupations were laid down on the basis of the Vocational Training Act in 1974:

(e) sufficient demand for the corresponding skills, which are to be of enduring validity and not specific to any particular company,

(f) training for skilled, autonomous activities in as broad a field as possible,

(g) gearing toward long-term occupational activity irrespective of age,

(h) broad basic vocational training,

(i) possibility of a regulated training programme,

(j) adequate demarcation vis-à-vis other traineeship occupations,

(k) achievability of the training goals,

(l) training to cover between two and three years,

(m) basis for advanced training and occupational advancement,

(n) acquisition of the ability to reason and act autonomously in applying knowledge and skills.

These criteria are currently being reviewed to meet changed circumstances (*Bundesinstitut für Berufsbildung* 1997). It can be assumed that even more emphasis will be attached in future to the aim of developing the competence to act autonomously within one's occupational environment. In a declaration of principle published in January 1997, employers' representatives defined the goal as follows: "Acquisition of competence for taking occupational action through the development of core occupational skills and the gaining of occupational experience". Also due for enhanced emphasis is the significance of initial vocational training as a basis for lifelong learning. But it is generally accepted that the criteria as they stand allow generous leeway for interpretation which can be used to accommodate the needs observed in the various sectors when the training regulations are updated.

The criteria for the skeleton curricula governing instruction at vocational colleges have also been updated in recent years. The main goal of developing competence for autonomous action in one's occupational environment has been further reinforced since 1996 by the fact that the contents of the instruction now have to be structured in occupation-related fields of learning. Descriptions of the goals aspired to for a given field of learning have taken the place of a listing of individual learning goals, and the information on the content of the instruction is now worded in more abstract terms and relies more heavily on examples. Teachers are thus given greater autonomy and can adhere better to the times indicated for each field of learning. Moreover, it is now easier to take account of regional differences and the process of curriculum obsolescence has been slowed down.

The involvement of the Federal Government, employers' federations and trade unions in drawing up training regulations ensures that such regulations do not reflect one-sided interests. The involvement of the social partners is of particular importance in this respect. The greatest part of total vocational training provision takes place in private-sector companies and in administrations, but the decision on whether to provide training and, if so, for how many trainees is one which is left to each individual employer. The Federal Government takes account of the fact that training regulations have to be implemented within a corporate environment by involving the social partners from the outset in the process of developing them and generally does not issue any statutory regulation on training without having sought the prior consent of the social partners concerned. This "consensus principle" is one of the pillars of the dual system.

The experts appointed by the employers, who naturally see themselves as advocates of the practical interests of business, argue that traineeships should prepare young people in a very practical way for being deployably competent when embarking on their occupational career. The experts appointed by the trade unions see themselves as the advocates of the interests of future employees. Their basic position is that the training profiles should be as wide-ranging as possible so that the newly qualified skilled worker is employable in a number of jobs. The

trade unions (which represent entire industries in Germany) are also concerned to ensure that the standard of initial vocational qualifications is largely uniform across the country. The social partners' common concern however, namely of improving the quality of training, allows them to arrive at acceptable compromises when working together on the drafting of training regulations. This proved to be the case not only in the 1980s when training contents were made to reflect more clearly the concept of developing competence to act autonomously in one's occupational environment but also during the 1990s when more flexible structures were introduced to allow employers greater leeway in designing their training programmes.

The results of the process to develop initial vocational training regulations are binding on the *Länder* in their procedures for drafting skeleton curricula. The *Länder*, however, are also brought into the development and co-ordination process at an early point in time.

A nationally uniform framework exists for the instruction delivered at vocational colleges as a result of the fact that the skeleton curricula for this college-based instruction are developed by the various curriculum committees of the Standing Conference of Ministers of Education of the Federal States (KMK). Individual *Länder*, however, are at liberty to implement the skeleton curricula as they see fit. Some *Länder*, for example, have structured their curricula following a strictly subject-based system, others prefer an action-oriented structure and still others prefer a hybrid structure. The examination assignments developed by the chambers have a certain influence in this respect as there has recently been evidence of a tendency to set uniform action-oriented assignments nationwide.

3.2 Qualification for the "assistant" occupations

The qualification for so-called "assistant" activities is obtained on completion of a two-year or longer course at a full-time vocational college (KMK 1997b). A distinction is made here between the qualification for technical occupations on the one hand and commercial occupations on the other (7). The following refers to the framework agreement for the "assistant" qualification in technical fields (KMK 1998), as the courses for the corresponding qualification in commercial fields are currently being revised (Marek/Neumann 1999, p. 10).

The framework agreements lay down the following:

(o) designation (e.g. state-certified technical assistant for information technology);

(p) training goal: list of the skills in which the technical assistant is to be competent on completion of the training and the fields in which such skills are required;

(q) duration of training: two years; the duration may be three years if the course also confers

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(7) The initial training for occupations in the health and social services sector has a special status within the German education and training system (see the case studies included in this report).

an entitlement to proceed to a specialised institute of higher education;

(r) fields of learning and indications of the time to be spent thereon: the instruction is divided into a cross-occupation component and an occupation-related component; times are indicated (in instruction hours) for the instruction in each individual subject;

(s) examination requirements and examination procedures.

The qualifications from two-year or longer courses at full-time vocational colleges are intended to stand for an ability which combines occupation-related competence with social and methodological skills. The instruction is expected to develop occupational flexibility and the ability and willingness to proceed to advanced and continuing training. Also to be developed by the instruction is a sense of responsibility for participating in adult society and for the course of one's own life. Full-time vocational colleges also offer additional courses which open up the possibility for obtaining further educational qualifications.

The individual *Länder* ensure co-ordination in the stated purposes and goals of full-time college courses on their respective territories by adopting framework agreements (formal decisions of the KMK). Within that framework, individual states are at liberty to set their own priorities.

3.3 Federally regulated advanced vocational qualifications

Federally regulated advanced vocational qualifications cover a range of concepts. The *Meister* concept is found in the craft sector, the industrial sector, the agricultural sector and the institution management sector. The *Fachwirt* concept and the *Fachkaufleute* concept are found in the commercial sector and the services sector (see Tillmann 1995, Letzner/Tillmann 1998). The following description focuses mainly on the Meister qualification in the industrial sector as this serves as a model for much of the regulatory work relating to advanced training in technico-industrial occupations falling within the purview of the Vocational Training Act. Its examination regulations have been taken as the basis for examination regulations in other sectors issued by the Federal Government under the provisions of § 46.2 of the Vocational Training Act or by the chambers of commerce and industry under the provisions of § 46.1 of the same statute (Scholz 1996).

The various types of advanced training leading to the *Industriemeister* qualification are regulated via examination regulations. These nationally uniform examination regulations are intended to structure advanced training in a particular field, to make it uniform nationwide and to improve substantive training standards. In the case of the regulations governing the *Industriemeister* qualification, these goals were achieved by defining all specialisms within the sector on the basis of a uniform structure:

(t) goal of the examination and designation of the qualification,

admission conditions (skilled worker qualification in the corresponding specialism plus three years of relevant occupational experience or, in the event that the skilled worker qualification held is in a different specialism, eight years of occupational experience in the specialism to be examined for the qualification),

a cross-specialism part (for managerial skills),

a specialism-specific part (examination units in the case of the *Industriemeister* qualification in metalworking: technology, organisation, management and personnel),

a vocational pedagogy part (corresponding to the examination laid down in the Training Aptitude Regulation to the effect that every qualified *Industriemeister* is also a qualified trainer).

How the candidate prepares himself or herself for the examination is basically up to the candidate. Preparatory courses, however, are available, offered mainly by the chambers on a full-time or part-time basis. The vast majority of such courses entail between 500 and 1,200 hours of instruction.

In 1976 the former Federal Committee for Vocational Training (predecessor of the Board of the Federal Institute for Vocational Training) drew up "Recommendations on criteria and procedures for issuing advanced training regulations and on the structure thereof". According to the recommendations, advanced vocational qualifications awaiting nationally uniform regulation should meet the following criteria:

(u) an adequate demand must exist in qualitative and quantitative terms for the envisaged qualification;

(v) the demand must extend beyond the local region and must not be limited to the foreseeable future;

(w) the profile of the envisaged qualification must be given the broadest possible basis, it should be practicable for the broadest possible range of activities, and it should offer a sound basis for the holder's subsequent ability to adapt to changing circumstances;

(x) the envisaged advanced qualification must be clearly different in standard from the corresponding initial qualification; generally, the admission conditions for the advanced training should require a initial vocational qualification plus a subsequent period of relevant occupational experience;

(y) the envisaged qualification must have sufficient "weight" to stand in its own right; there can be no question of short-term training measures here;

(z) the envisaged training must be clearly demarcated from other advanced training tracks and its position vis-à-vis these must be clearly apparent.

In the case of the relatively new advanced qualification of Industriemeister specialising in metalworking, particular emphasis is attached to developing an all-round competence for autonomous occupational action. This indicates that the *Meister* qualification (like the *Fachwirt* qualification) is intended to be geared less to specialised occupational activities than to intermediate-level supervisory and managerial activities. Accordingly, the examination section entitled "action skills" contains situational assignments which integrate the three examination fields, namely technology, organisation and management/personnel. In general terms this signifies that these nationally uniform advanced qualifications are usually oriented less to specific functions than to an entire industry.

The commercial and services sectors have the following advanced vocational qualifications: *Fachwirt, Fachkaufmann* and *Betriebswirt*. The emphasis here is on deepening occupational knowledge relating to individual functions. The *Betriebswirt* qualification, moreover, is rated at a higher level than the *Fachwirt* and *Fachkaufmann* qualifications and is likely in future to be set on an equal footing with the qualifications obtained from a specialised institute of higher education. At the moment, however, this equivalence has still not been definitively established.

Generally it is true to say that the involvement of the social partners in the preparation, development and co-ordination phases reduces any tendency towards the qualifications being geared to any one-sided interests. A nationally uniform advanced training regulation is issued only with the consent of both of the social partners. The Federal Minister of Education and Research does not determine the key regulatory parameters and does not rule on a proposed advanced training regulation until the social partners have themselves arrived at a consensus on the matter.

3.4 Advanced vocational qualifications regulated by the *Länder*

The qualifications *Techniker, Betriebswirt* and *Gestalter* - the title in each case being preceded by the term "state-certified" - are obtained at specialised vocational colleges. All qualifications associated with these three titles are further classified by specialism and in some cases additionally by priority fields within an individual specialism (KMK 1998).

The specialised vocational colleges offering these advanced qualifications are structured by specialism, i.e. production, economics and design. Each specialism represents a self-contained advanced training track, admission to which calls for a relevant initial vocational qualification in conjunction with corresponding occupational experience. The subdivision of specialisms into priority fields can be undertaken by the individual *Länder* themselves. As a rule, the regulations provide for the following:

(aa) designation of occupation (e.g. state-certified ... specialising in ...);

(bb) duration of the advanced training: two years. Advanced training courses here are offered in both full-time and part-time format, the total duration of training being correspondingly longer in the latter case;

(cc) the advanced training is divided into a compulsory field of learning and an elective field of learning, regulation of the latter being in the hands of the individual *Länder*. The duration should be at least 2,400 hours of instruction;

(dd) the compulsory field comprises three areas of learning. Learning area I, communication / society is usually designed as a cross-specialism component. Learning area II, technology / organisation, contains units which are specific to the specialism chosen and prepare the learner for the project-based or practice-geared approach used for learning area III. Learning area III is vocational training in [illegible] field of production or economics or design, as appropriate. Indications of the time to be spent on each area of learning are also given, and the training content is further specified;

(ee) examination requirements and examination procedures.

The general aim of this advanced training is to enable skilled workers who already have an initial vocational qualification and occupational experience to carry out intermediate-level supervisory and managerial tasks. The activities of a state-certified *Betriebswirt* specialising in economics, for example, straddles the interface between decision-making on business strategy and planning matters on the one hand and the measures and activities required to implement such decisions on the other. The holder of the qualification should be capable of cooperating constructively with more senior decision-makers and subordinate co-workers and also foster and use external contacts within the limits of his or her competence. The economics specialism can be designed to be specific to a particular industry or a particular function or can be kept more general, dealing with business economics as a whole.

The tasks and goals of the training are co-ordinated by the *Länder* on the basis of a framework agreement. Each of the *Länder* is at liberty to set its own priorities within this framework, but these must be notified to the Standing Conference (KMK). Although the social partners are not involved in developing the training for these qualifications, the *Länder* are subjected to a certain pressure for legitimation insofar as they have formally committed themselves only to offer such advanced vocational qualifications if a demand for them exists on the labour market. Generally speaking, qualifications of this type can compete on the labour market with other qualifications at this level *(Meister, Techniker)*, partly because unlike in the case of federally regulated qualifications, the training here also leaves scope for social and cultural contents.

3.5 Advanced vocational qualifications regulated by the "competent agencies"

Advanced vocational qualifications regulated by the so-called competent agencies (chambers of commerce and industry, chambers of crafts) are valid within a given region. The large number of advanced training regulations in existence is less than matched by the number of corresponding qualifications (1995: 2,250 regulations, 350 qualifications), and not all of these are actually advanced qualifications in the strict sense of the term (Tillmann 1995). For example, designations such as *Fachwirt* and *Fachkaufmann* are also to be found among these qualifications but it has been found that - as in other occupational fields - they do not always comply fully with the criteria of uniformity and permeability (Letzner/Tillmann 1998). Over the past few years a stronger interest has been expressed in nationwide co-ordination and, where appropriate, in subjecting these qualifications to federal regulation (1996 agreement between the social partners).

4. Definition of classification systems

As mentioned at the beginning, the vocational qualifications awarded in the German training system cannot be fitted into any single, uniform classification system. The situation is rather that several systems, each with its own criteria, co-exist and are distinguished one from the other by the regulatory body responsible (Federal Government, *Länder* governments) and by qualification level (initial or advanced). A further characteristic feature is that the skill level is defined in relatively general terms. Input criteria are thus of particular importance in defining the level of the qualification.

Scheme 2: Vocational qualifications at ISCED level 3

Classification criteria	State-recognised traineeship qualifications	"Assistant" qualifications
Typical admission requirements	Completion of compulsory general education	Completion of compulsory general education
Minimum educational achievement conditions	School-leaving certificate (no formal qualification required)	Intermediate secondary or equivalent education certificate (depending on specialism)
Type of subsequent position on the labour market or subsequent education/training	Skilled worker, skilled employee; or (depending on educational qualification held): access to tertiary sector or general or vocational education programmes conferring an entitlement to access the tertiary sector	Assistant occupations within the employment system or (depending on attainment): access to general upper secondary education programmes or: access to college-based vocational education programmes conferring an entitlement to access the tertiary sector
Main goals of the training/learning programme	Development of competence to act autonomously within one's occupational environment: geared to fields of activity and function in the employment system but not specific to any individual company's operations; Preparation for a diverse range of skilled activities; Contribution towards developing the personality	Development of deployable competence involving a combination of occupation-specific, strategic and social skills; Promotion of occupational flexibility and willingness to continue learning; Development of a sense of responsibility for participating in public life and shaping one's own life
Theoretical duration of the programme (full-time equivalent)	Usually three to three-and-a-half years	Two years

Scheme 3: Vocational qualifications at ISCED level 4

Classification criteria	Federally regulated advanced vocational qualifications	*LÄnder*-regulated advanced vocational qualifications
Typical admission requirements / minimum admission conditions	Initial vocational qualification in the corresponding specialism plus two to three years of relevant occupational experience or if the initial vocational qualification is lacking: six to eight years of relevant occupational experience	Relevant initial vocational qualification or vocational education certificate plus relevant occupational experience (usually two years)
Type of subsequent position on the labour market or subsequent education/training	Training for middle management and specialised occupational activities and: under certain conditions, possibility of accessing tertiary sector	Training for activities in intermediate functions or: access to general education or (fast-track) vocational education programmes conferring entitlement to access the tertiary sector
Main goals of the training/learning programme	Development of occupational competence for middle management positions by means of an integrated approach to acquiring occupation-specific, cross-occupational and training skills	Development of occupation knowledge in subjects relevant to the specialism
Cumulative duration of the programme (full-time equivalent) from commencement at level 3	Six to six-and-a-half years (three to three-and-a-half years of initial training plus three years of occupational experience plus one-year full-time or correspondingly longer part-time training course)	Six to seven years (two to three years of initial training plus two years of occupational experience plus two years at a specialised vocational college)

5. Scope and legal force of training regulations

The national classification system for all training outside the strictly tertiary sector distinguishes between two qualification levels, namely initial and advanced. In both categories a further distinction is made between federally-regulated and *Länder*-regulated qualifications.

The Vocational Training Act regulates initial vocational training within the dual system in all sectors of the economy except the craft sector; the corresponding provisions of the Craft Regulation Code, however, have been aligned with those of the Vocational Training Act. Under the terms of these statutory instruments, the in-company component of the training must be for a state-recognised traineeship occupation. The college-based component (part-time) is regulated by the *Länder*. The Vocational Training Act also regulates the basic principles to govern advanced vocational training. Federally regulated qualifications are further concretised on the basis of criteria and recommendations adopted by the Board of the Federal Institute for Vocational Training. These criteria and recommendations are not legally binding, but their political clout is vastly enhanced by the fact that they are the outcome of a process in which all parties involved in vocational education and training participate (Federal Government, Länder governments, employers' federations, trade unions).

In the case of the qualifications regulated by the *Länder*, framework agreements concluded at national level by decision of the Standing Conference (KMK) ensure consistency nationwide in terms of formats and standards. The provisions of these framework agreements are reflected in the education acts and regulations passed by the *Länder*, though individual *Länder* can set their own priorities within the agreed framework.

The advanced vocational qualifications regulated by the competent agencies are of regional validity only. Since however, they differ to a certain extent, it would not be appropriate to speak of a classification system existing in this sector. Regulations which have acquired validity beyond the regional level are to be standardised in future to conform with federal legislation.

6. Aims and functions of the classification systems

Generally speaking, the classification systems for initial and advanced vocational qualifications are intended to fulfil the following functions:

(ff) quality assurance: As statutory instruments they determine the level of the training and the examination and thereby set the standards for the initial and advanced training provided by the employer and at vocational college or other education and training institution (e.g. the chambers, private-sector providers). They thus ensure comparability

between different qualifications at the same level and an appropriate differential between qualifications at different levels;

(gg) marketability: The fact that training levels and profiles are standardised makes the system highly transparent; this is particularly important for employers, who as a result of this standardisation are able to source their manpower needs from the labour market with considerable confidence. At the same time, standardisation also reduces - de facto - the individual's dependency on a single employer (indeed on the original employer who provided the training) because the training is not geared exclusively to the specific needs of the company providing it;

(hh) collective bargaining: The level of the initial vocational qualification within the dual system serves as a reference for classifying collectively agreed wage and salary systems.

7. Procedures for developing training programmes

7.1 Qualifications in recognised traineeship occupations

Training regulations are developed and co-ordinated with the skeleton curricula of the *Länder* on the basis of a four-stage procedure adopted by the Board of the Federal Institute for Vocational Training (BIBB) in 1984:

(ii) a research and development stage during which the Federal Institute for Vocational Training draws up documents for decision-making on matters relating to the structure and content of an envisaged regulation;

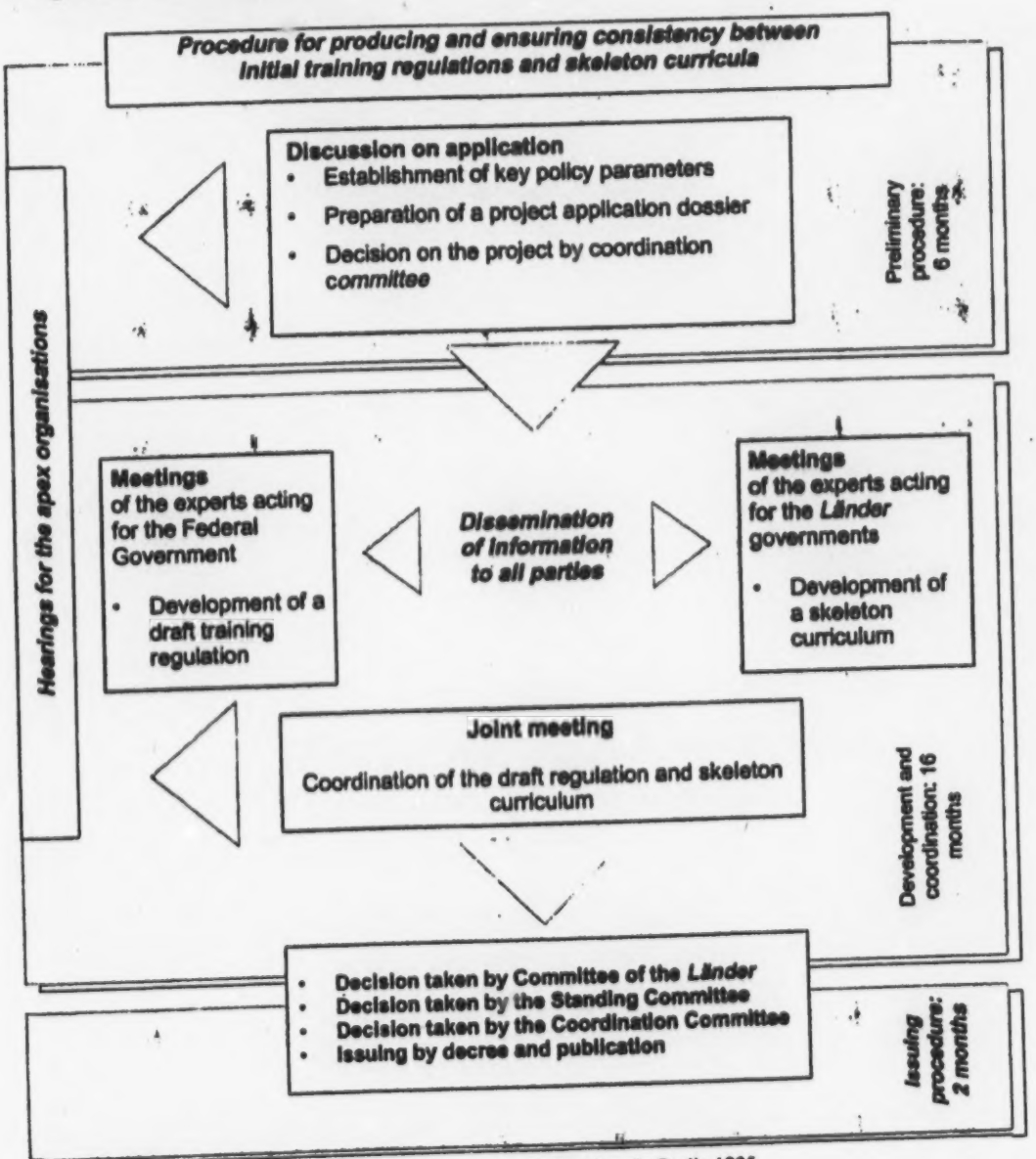
(jj) a preliminary stage during which employers' federations, trade unions, the Federal Government and the *Länder* governments reach agreement on implementing the training regulation project and determine the key parameters for the envisaged regulation. These key parameters and the project concept are documented in a project application dossier prepared by the competent sectoral minister with BIBB's support;

(kk) a development and co-ordination stage during which the Federal Institute for Vocational Training, in consultation with experts appointed by the Federal Government and acting on the latter's instructions, draws up a draft regulation. The experts appointed by the Länder develop a corresponding draft skeleton curriculum. The drafts are then co-ordinated for consistency in terms of content and time scheduling;

(ll) the apex organisations of employers and employees submit their comments on the work achieved to date;

(mm) an issuing stage during which the Federal Minister of Justice examines the documents for legal compliance. The competent federal minister, with the agreement of the Federal Minister of Education and Research, then issues the training regulation by having it published in the *'Bundesgesetzblatt'*. The Standing Conference of Ministers of Education (KMK) adopts the corresponding skeleton curriculum. The documents are then promulgated in accordance with *Länder* law. The training regulation and skeleton curriculum are published in the Bundesanzeiger Verlag.

Scheme 1: Procedure for producing and ensuring consistency between initial training regulations and skeleton curricula


Procedure for producing and ensuring consistency between initial training regulations and skeleton curricula
Discussion on application
• Establishment of key policy parameters
• Preparation of a project application dossier
• Decision on the project by coordination committee
Preliminary procedure: 6 months
Hearings for the apex organisations
Meetings of the experts acting for the Federal Government
• Development of a draft training regulation
Dissemination of information to all parties
Meetings of the experts acting for the Länder governments
• Development of a skeleton curriculum
Joint meeting
Coordination of the draft regulation and skeleton curriculum
Development and coordination: 16 months
• Decision taken by Committee of the Länder
• Decision taken by the Standing Committee
• Decision taken by the Coordination Committee
• Issuing by decree and publication
Issuing procedure: 2 months

Source: Benner, H.: Ordnung der staatlich anerkannten Ausbildungsberufe, Berlin 1995

7.2 Federally regulated advanced vocational qualifications

The preparation and issuing of advanced training regulations governing advanced vocational qualifications is carried out by the Federal Government in compliance with recommendations made by the Federal Committee for Vocational Training (today Board of BIBB) in 1976. The procedure is as follows:

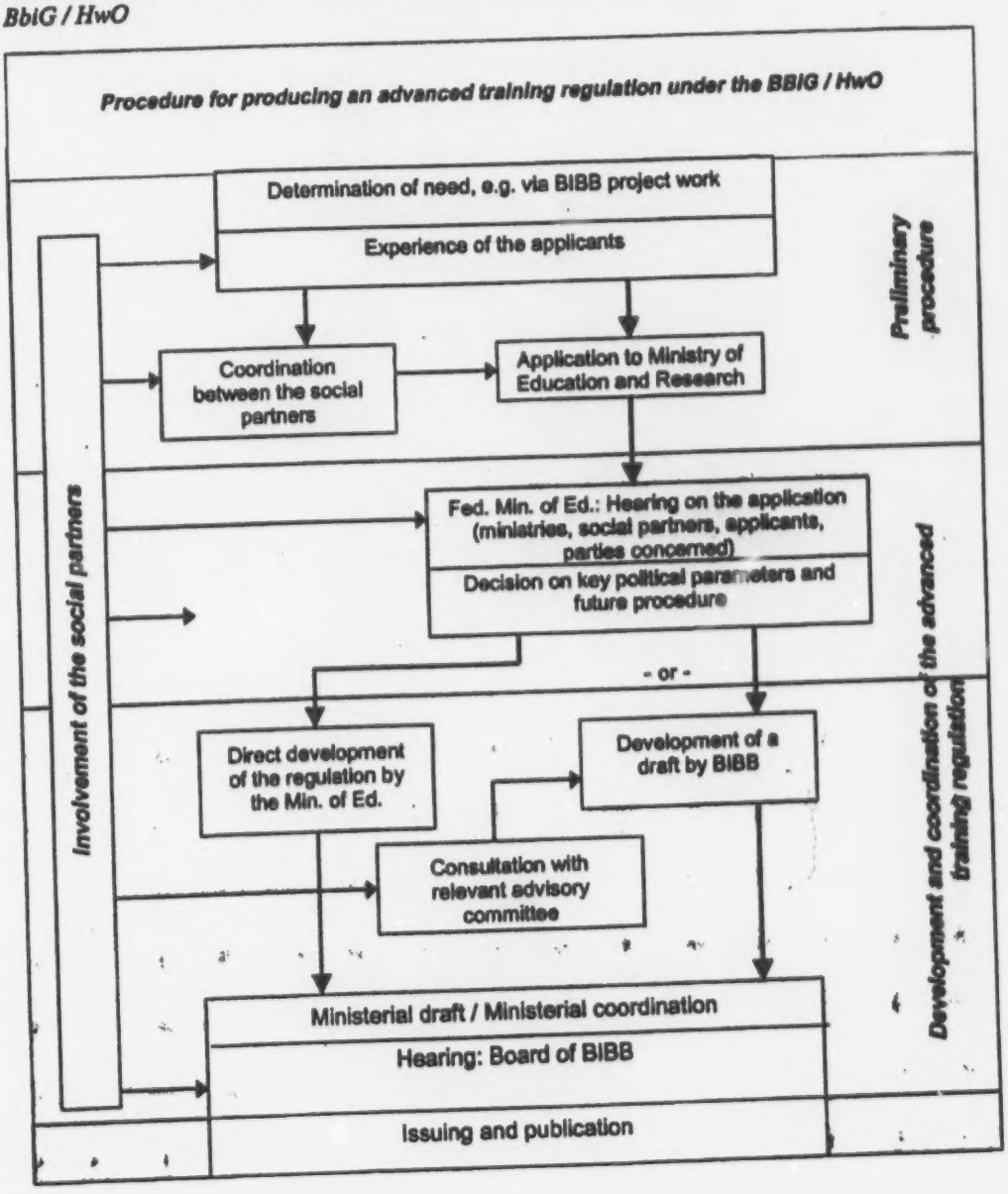
(nn) acting via the apex organisations of the two sides of industry after having reached agreement between themselves, the parties with an interest in having an advanced qualification established submit a corresponding application to the Federal Minister of Education and Research which, acting as lead agency, contacts the other federal ministries concerned;

(oo) the Federal Minister of Education and Research examines the need for regulatory action on the basis of hearings (ministries, social partners, applicants, parties concerned) and takes decision on the political framework and subsequent procedures;

(pp) if, as in many cases, there is still a need to clarify details of the application, the Federal Institute for Vocational Training is mandated with carrying out the preparatory work and draws up a draft advanced training regulation in consultation with the experts acting on behalf of the social partners. The preparatory work is guided by the aim of bringing about consensus on the details of the regulation in the interest of problem-free implementation of the envisaged training;

(qq) after studying the documentation and having heard the views of the Board of BIBB, the Federal Minister of Education and Research takes decision on issuing the regulation, which is then published in the *Bundesgesetzblatt*.

Scheme 1: Procedure for producing an advanced training regulation under the BbiG / HwO


Procedure for producing an advanced training regulation under the BBIG / HwO
Determination of need, e.g. via BIBB project work
Experience of the applicants
Preliminary procedure
Coordination between the social partners
Application to Ministry of Education and Research
Involvement of the social partners
Fed. Min. of Ed.: Hearing on the application (ministries, social partners, applicants, parties concerned)
Decision on key political parameters and future procedure
- or -
Development and coordination of the advanced training regulation
Direct development of the regulation by the Min. of Ed.
Development of a draft by BIBB
Consultation with relevant advisory committee
Ministerial draft / Ministerial coordination
Hearing: Board of BIBB
Issuing and publication

7.3 Initial and advanced vocational qualifications regulated by the *Länder*

Applications for college-based initial and advanced training courses can be filed by public or private education bodies or by registered associations. In the advanced training sector, most applications are filed at the initiative of private colleges seeking to make their courses more attractive on the education and training market by being able to use the title "state-certified...". Draft documents are drawn up by the ministers of education of the *Länder*. The officers drafting the documents ensure to the best of their ability that a demand does actually exist for the qualification in question or that such a demand can be generated in the future. The drafts are checked for compliance with existing framework agreements on initial and advanced vocational qualifications. During this process it may be, for example, that the list of specialisms for a particular type of qualification is lengthened at the request of a federal state. Individual *Länder* can also arrange for new priority fields to be incorporated within a particular specialism. Once in finalised form, the draft can be published by the Minister of Education of the state concerned as a ministerial decree.

8. Keeping qualifications up to date

As a matter of principle it is always the body issuing the regulation which is responsible for keeping the qualification up to date. As far as the federally regulated initial and advanced qualifications are concerned, the social partners have considerable influence in determining when a qualification should be updated. How they carry out the corresponding exchange of experience and views is a matter left to the social partners themselves. Ideas can also be submitted by the Federal Institute for Vocational Training or, in exceptional cases, by representatives of vocational colleges. In the case of qualifications regulated by the *Länder*, it is the ministers of education of these individual *Länder* who have to decide whether a qualification should be updated to take account of new developments.

The time intervals between updatings depend heavily on developments in the industry concerned. There is an increasing awareness today of the need for all training to be up to date. Experts consider that intervals of five years are appropriate for checking whether the minimum standards laid down are still in line with the demands of technological, organisational, economic and social change. It is also argued that it is normally after a period of five years that adequate experience has been accumulated on how the training regulation functions in practice (see Stiller 1996). As far as initial vocational qualifications are concerned, the Federal Government and the social partners agreed in 1995 that the development procedures should be speeded up. An important issue here is reaching agreement on the extent of the reform needed, namely whether it is just the contents and possibly also the examination requirements which should be adapted to meet changing needs or whether there is a need for a fundamental review and redrafting of the underlying concept. The ministry should take decision on applications for updating within a period of three months. If it is only the content and the

examination requirements which are to be modified, the updating process should not take longer than one year to complete. In the case of a fundamental structural redrafting, a period of two years is envisaged.

In the case of federally regulated advanced qualifications, the input of the Federal Government towards the updating work is not as extensive as the regulatory purview here extends only to the examination requirements. For some types of qualification however, for example the Meister, it often happens that the updating work also has to cover the occupation-specific component of the training (as opposed to the cross-occupation and pedagogic components).

9. Comparison of the German classification system with the European five-level system

For the purposes of determining training levels, the five-level system links output criteria, namely the ability to execute practical work autonomously, with input criteria, i.e. the completion of certain initial training courses such as a *Berufsausbildung* or a *Fachausbildung*. It can be concluded from the fact that specific mention is made of apprenticeship being located at level two that the classification was developed from a college-based educational perspective where apprenticeships have traditionally been restricted to the less skilled occupations of the craft sector (e.g. as is the case in France). As far as level-three qualifications are concerned, this perspective evidently assumes that these cannot be obtained via an apprenticeship. In brief, the implication is that an apprenticeship trains an individual only for carrying out specific activities and that it does not entail enough theoretical knowledge to enable an individual to carry out more demanding and wider-ranging practical work in an autonomous manner.

Starting with its work to update the training regulations in the metalworking and electrical engineering fields in the mid-1980s, Germany has established so-called "action competence" in the sense of being able to plan, execute and monitor one's own work autonomously as the overarching goal of initial vocational training. Such "action competence" corresponds with level three of the Five-Level System. It is only the first stage of graduated initial training programmes which can be considered to be located at level two of the European classification system.

Including learning venues as an input factor is a highly dubious indicator of the expected output or learning impact as this factor takes inadequate account of the complexity of the overall context. By way of explanation, any analysis of learning venue issues has to make a distinction between two structural levels:

(II) the institutional level, where complex entities are located: the training company, the central training venue, the vocational college. The distinguishing criteria at this level are: underlying organisational body, legal powers, supervisory possibilities, examination powers, funding arrangements;

(ss) the organisational and didactic level, where the sub-entities are located: the workplace, simulation facilities, training workshops / junior offices, practice, teaching, demonstration and coaching rooms. The distinguishing criteria at this level are curricular, didactic and methodological considerations.

Despite the diversity of its institutional framework at the learning venue level, Germany is witnessing an accelerating trend towards internal differentiation and diversification in terms of learning venues and places. Occupation-specific theory, for example, is no longer being taught only at college but also in central training venues catering for trainees from several companies and in on the company shop floor itself. Conversely, the practical training is being delivered not only on the shop floor but also at other institutional training venues.

The criteria contained in the Five-Level System for classifying qualifications at level four are relatively unspecific. Moreover, here again there is explicit emphasis on college-based learning venues. For example, access to initial and advanced vocational training in Germany is not conditional upon attendance at secondary schools. It emerges that it is not mastery of the scientific principles of the various fields of knowledge and skill which is in demand. In this respect the level is below that of university qualifications. On the other hand, the final qualification is reported as entailing knowledge and skills which enable the holder to work on his or her own responsibility - including in the field of operations management, a faculty which is an important element of Germany's Meister qualification. Generally speaking it would probably be appropriate to position these German advanced qualifications at level four in the Five-Level System. As already stated, more and more advanced vocational qualifications are being established outside the university education sector (e.g. *Betriebswirt)*, which are undoubtedly equivalent to the qualifications obtained at university-like *Fachhochschulen.*

10. Application of the five-level system to Germany

In 1995 the *Institut der Deutschen Wirtschaft* commissioned a study on the effect of the Five-Level System on the classification of German vocational qualifications. The aim of the study was "to explore the practical significance of the Five-Level System for the holders of vocational qualifications and for German companies" (Koch 1995, p. 2). The study entailed a total of 87 telephone interviews. The persons contacted worked for labour administrations, employers' federations, apex organisations of the business community, industrial and business associations in the metalworking, electrical engineering, construction, and wholesale and foreign trade industries, chambers of commerce, chambers of crafts, employee organisations, and private-sector companies in the construction, electrical engineering, automotive, mechanical engineering, plant engineering and aerospace industries. The first issue researched was the extent to which German companies were already noticing a negative impact on their competitiveness on European markets as a result of the unduly low

classification of German qualifications by the Five-Level System (e.g. when bidding for orders).

All conversations began with the following wording: "The Five-Level System classifies vocational qualifications at skilled worker level. Compared with other European qualifications, German qualifications are classified at too low a level. This study is investigating the issue of whether this unduly low classification rating is leading to concrete adverse effects on competition within the EU. Have such cases of disadvantage come to your attention?" This question was then further elaborated, the subsequent wording depending on whether the respondent was answering more from the employee viewpoint or the employer viewpoint.

In general terms the study showed that the majority of the companies, associations and organisations were not familiar with the Five-Level System. The few who were familiar with it, however, denied that it was having an impact on their competitiveness vis-à-vis their European rivals, at least at that point in time (1995). The study found further that German companies' competitiveness could be adversely affected in future if proof of compliance with certain quality standards laid down by a contractor were to be judged on the basis of the Five-Level System.

Part III

11. Case study on the construction industry

11.1 Initial and advanced vocational qualifications in the construction industry

The following case study focuses on initial vocational qualifications in the industrial and craft trades of the construction industry and on the advanced vocational qualification known as certified *Polier*. The initial qualifications in the construction industry are level 3 qualifications under the ISCED classification, the advanced qualification as *Polier* is a level 4 qualification.

The initial qualifications in the construction industry, 37 in number, can be broken down into 28 which belong to the occupational field "construction engineering" and 8 outside this occupational field (e.g. scaffolder). Of the 28 qualifications belonging to the field of construction engineering, 18 entail a graduated type of training. The following describes the procedures for updating the initial training, the areas of conflicting interest involved and the results just for these 18 construction engineering qualifications for which the training is designed in a graduated format.

Scheme 6: Qualifications in the field of construction engineering (with a graduated training format)

1st stage		2nd stage	
Foundation training catering for the entire occupational field with 3 priority fields: building construction, construction finishing, civil engineering	Building construction worker (I, Hw)	Mason	I, Hw(*)
		Concretor	I, Hw
		Furnace and chimney builder	I, Hw
	Construction finishing worker (I, Hw)	Carpenter	I, Hw
		Stuccoist	I, Hw
		Tile and mosaic layer	I, Hw
		Screed layer	I, Hw
		Thermal and noise insulation fitter	Hw, I
		Dry construction builder	I
	Civil engineering worker (I, Hw)	Road builder	I, Hw
		Pipeline fitter	I
		Duct builder	I
		Well builder	I, Hw
		Special civil engineering works builder	I
		Rail track builder	I

(*) I = initial qualification in the industrial sector; Hw = initial qualification in the craft sector

The advanced qualifications in the construction industry are the *Polier*, the *Meister*, the *Baumaschinenführer* and the *Techniker*. Although several *Meister* qualifications exist - for example for the various trades within the craft segment of the construction industry - in general terms the advanced qualifications in the construction industry are much less differentiated than the initial qualifications. The regulation governing advanced training leading to the *Polier* qualification, for example, differentiates only between field of specialisation: building construction, construction finishing or civil engineering.

Persons holding the *Polier*, *Meister* or *Techniker* qualifications in the construction industry work in different fields. The job of the *Polier*, roughly speaking, is to organise the work on major construction sites and fulfil a leadership role for the workers. The *Meister* qualification in masonry is basically similar, but the holder is additionally trained to run a company and must therefore have a greater understanding of business management matters, for example cost accounting. The holders of both qualifications are also qualified to provide initial vocational training as they have been examined to standards laid down in the Training Aptitude Regulation. The holder of the *Techniker* qualification, by contrast, is more concerned with indirect aspects of construction, is more specialised and needs an understanding of more complex theory in order to be able to support construction engineers in their work.

The following describes in succession the procedures for updating, firstly, the regulations governing the graduated-format initial training for construction occupations and, secondly, the regulation governing the advanced training leading to the certified *Polar* qualification. These two qualifications are examined separately partly because the procedures for updating training programmes differ depending on the level of the training concerned, and partly because the two qualifications were established at different times. The regulations on graduated initial training programmes for construction occupations were updated in 1997 and 1998 and will enter into force on 1 August 1999. The regulation on the examination for the certified *Polier* qualification, by contrast, dates back to the year 1979, though the cross-specialism component thereof and the above-mentioned Training Aptitude Regulation have since been revised.

11.2 Updating of graduated-format initial training for construction occupations

Parties involved in the updating process

The following institutions and individuals were involved in the various stages of the process to update the graduated-format initial training for construction occupations:

(tt) Sector federations and trade unions:

employers: *Hauptverband der Deutschen Bauindustrie*,

craft sector: *Zentralverband des Deutschen Baugewerbes*

trade union: *Industriegewerkschaft Bauen - Agrar - Umwelt*

Apex organisations of the sector federations, the competent agencies and the trade unions:

(i) business community: *Kuratorium der Deutschen Wirtschaft für Berufsbildung* (KWB),

(ii) chambers of commerce and industry: *Deutscher Industrie- und Handelstag* (DIHT),

(iii) craft sector: *Zentralverband des Deutschen Handwerks* (ZDH),

(iv) chambers of crafts: *Deutscher Handwerkskammertag* (DHKT),

(v) trade unions: *Deutscher Gewerkschaftsbund* (DGB),

Experts acting on behalf of the social partners:

(vi) The representatives on the employer side were company proprietors, directors of central training venues,

(vii) The representatives on the employee side were staff working in craft enterprises, teachers employed in vocational education, trainers employed in central training venues,

(uu) Federal level:

(i) Federal Ministry of Education and Research (BMBF),

(ii) Federal Ministry of Economics and Technology (BMWi),

(iii) Federal Institute for Vocational Training (BIBB),

(vv) *Länder* level:

(i) Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany (KMK).

The individual steps in the updating procedure

The procedure for updating the graduated-format initial training for construction occupations complied largely with the procedure laid down by the Board of the Federal Institute for Vocational Training in 1979 and 1984 for developing initial training regulations and ensuring consistency between these and the corresponding skeleton curricula.

Research and development phase

Acting on exploratory talks dating back to 1992 between representatives of the Federal Institute for Vocational Training and the federations concerned, the Federal Institute proceeded to carry out a research project on new skill requirements in the construction industry. It was supported in this work by construction industry experts. The aim of the project was to document the activities carried out in the construction industry and attribute these to areas of action with a view to obtaining a profile of the tasks currently carried out by skilled manpower working in the industry.

Preliminary procedure

Once the project findings were made available, a lengthy period of time was spent preparing for the hearing on the application before the competent sectoral minister. During this phase the Federal Institute for Vocational Training drew up proposals for reforming the content of initial training programmes for construction occupations and conducted negotiations with the federations concerned, a process which also involved consulting the apex organisations of the two sides of the industry. The proposals focused on the following:

- Graduated (two-stage) initial training for both the industrial and the craft occupations

  One of the main issues for negotiation was the question whether the initial training should be graduated, i.e. in two stages. Under the terms of the old training regulation a graduated type of training was prescribed only for the industrial occupations, the first stage lasting two years and the second one year. The federations representing the industrial side of the construction industry wanted to see this arrangement retained in the revised training regulation. Those representing the craft occupations, by contrast, were originally opposed to this proposal but changed their position during the course of the negotiations. Since one of the trade unions' basic policy principles, however, is that all training programmes up for revision should last at least three years, the union representatives fought to have this principle respected. Given the situation, it was ultimately the Federal Minister of Economics and Technology, acting in consultation with the issuing body, the Federal Minister of Education and Research, who took the decision in favour of a graduated initial training format for all construction occupations, i.e. in both the industrial and the craft fields. The arrangement arrived at was a first stage lasting 24 months and a second stage lasting 12 months. The social partners remain by their view, however, that as a matter of principle an initial training should last three years. The main purpose of graduating the training is to allow trainees who fail the final examination after a three-year traineeship to be considered, under specific conditions, for the award of a formal qualification covering the first, two-year period of the training.

- Duration of initial training at central training venues

  A further controversial point was the duration of the training at central training venues.

The social partners ultimately agreed that the new training regulation should stipulate the duration of the training at such venues in a binding provision. The duration is between 32 and 37 weeks spread over the three years of training.

- Structure of construction occupations and assignment to occupational fields

There was more agreement between the social partners on the subject of the breadth and depth of the training contents. "Construction engineering" is a very complex occupational field insofar as it involves a number of different trades each with their own specific task profile (see Hoch 1999 on the following). As the structure of these individual trades has developed over the course of history, every occasion for updating the training raises the question whether to retain or change this occupational structure. A change is usually deemed necessary when economic, technological and organisational changes result in the formal structure being out of touch with the tasks actually carried out. Whereas the trade unions are more inclined to want to reduce the number of state-recognised occupations, the employers would prefer to maintain the currently differentiated structure. The outcome of the negotiations in this case was to retain the traditional structure for the construction engineering occupations. A main reason for this decision was that the heavily craft-based structure of the construction sector is tied directly to the trade structure laid down in the Craft Regulation Code. Experience has shown, however, that this code can only be modified gradually and over a lengthy period of time. As all the craft occupations in the construction sector are also deemed to be industrial occupations, this structure applies - with only few exceptions - to the construction industry likewise.

- Structure of the training programme

The amendment of 1 April 1998 to the Craft Regulation Code had an important impact on vocational training. As craft occupations are intended to and will indeed have a broader basis in future, the corresponding skilled workers will have to be trained to carry out a wider range of tasks. At the same time, however, these skilled workers are also expected to be capable of executing specialised tasks within that broader-based framework. Applied to the updating of training programmes in the construction sector, this meant that the interfaces and overlaps and also the demarcations between the individual trades needed to be made clearly apparent. The new initial training structure for construction occupations provides for a broad basic vocational training lasting one year which is to form the basis for both the subsequent specialised training and for access to several occupations within the occupational field concerned. The training is structured in three sections, namely a section with identical training content for all construction occupations, a second section with identical training content for the chosen specialism (building construction, construction finishing or civil engineering), and a third section which entails more profound training specific to the chosen occupation.

The post-foundation specialised training is intended first and foremost to develop so-called "action competence". The occupation-specific training content covered during this phase in a way reflects the work typically assigned to a skilled worker employed in the

construction engineering field. Particular importance is attached here to the interdisciplinary or overarching skills which should enable the skilled worker to take decisions autonomously, for example when planning work and work procedures at the workplace, setting up his or her workplace at the job site or taking measures to ensure health and safety at work.

The agreements reached during this preparatory phase constituted an important basis for the application hearing before the competent sectoral ministry, in this case the Federal Minister of Economics. The items addressed during this hearing, held in April 1997, included decisions on key training data, preparing the application for a project to update the training and the decision to be taken on the project by the Co-ordination Committee representing the Federal Government and the *Länder* governments.

Development and co-ordination phase

The decision of the Co-ordination Committee to go ahead with the project marked the beginning of the phase to develop and co-ordinate training ordinances for the in-company and central-venue training components and the skeleton curricula for the college-based instruction component, all of this on the basis of the key data already adopted. The latter relate to precise determinations on the structure of the training in terms of content and the time to be spent thereon (set out in the training ordinance) and to ensuring consistency between the training ordinance and the skeleton curricula for the college-based part of the training. The draft skeleton curricula for the various traineeship occupations were drawn up under the stewardship of the Federal Institute for Vocational Training acting in consultation with the experts appointed to represent the employers' federations and the trade unions. The skeleton curricula were drawn up by a curriculum committee of the KMK composed of experts acting on behalf of the *Länder* governments. A particular requirement to be met by those drawing up the skeleton curricula was to take due account of a new structural feature, namely the abandonment of the traditional system of structuring by curriculum subject in favour of a type of structuring which divides the college-based instruction into fields of learning on the one hand and fields of action on the other. A joint meeting was held to ensure consistency between the draft training ordinances and the skeleton curricula.

Issuance by decree

The drafts of the new ordinances governing the graduated (two-stage) training for construction occupations, together with the corresponding skeleton curricula, were then communicated to the Co-ordination Committee. After final scrutiny and consistency adjustments by the federal ministries involved, the training ordinance was issued in the form of a statutory instrument. The skeleton curricula were adopted by the KMK and translated by the 16 ministers of education of the *Länder* into college curricula applicable in their respective territories.

Time scale

The time required for updating training regulations depends heavily on the extent to which the research and development work is deemed to be part of the process:

- 1992: the initial initiative for updating was filed by the Federal Institute for Vocational Training;
- January 1993 to December 1994: implementation of the research project to determine what activities a skilled worker in the construction sector is expected to carry out; follow-up to this entailing the drafting of a proposed decision on updating training for the construction sector (completed in December 1996);
- initiation of the development and co-ordination procedure subsequent to the application hearing before the Federal Minister of Economics in April 1997;
- final joint meeting of the parties involved in November 1998;
- training regulation issued.

The negotiating parties' assessment of the updating procedure

The procedure was viewed very positively by the parties involved, particularly by the representatives of the two sides of industry. The preparatory work to determine the key training parameters was speeded up by the preceding research phase and the early involvement of experts from the construction industry.

During the course of the reform procedure itself, numerous arguments were developed and discussed; these discussions made it easier for those representing the various federations to put the final outcome of the negotiations to their memberships, and it can be assumed that they will also accept that outcome more readily as a result.

The procedure provides for the Federal Government acting alone to determine the key training parameters; strictly speaking the *Länder* governments have no role to play here. In fact, however, the views of the *Länder* governments are sought on the proposed project and efforts are made to try to reach consensus at the earliest possible point in time in the procedure.

Compromises reached and opinions on the final outcome

The employers took the view that the time agreed for training in central venues is too long, their argument here relying mainly on cost considerations. The trade unions were keen to ensure that the training profiles provide a sound basis for subsequent continuing training and therefore attached priority to having explicit reference made to as many interdisciplinary (overarching) key skills as possible.

Problems in implementation

It is not yet possible to gauge any problems which might arise in implementation as training in compliance with the new regulation will not commence until August 1999. The training delivered on construction sites from then on is likely to differ mainly as regards the "key skills" (work planning, setting up job sites, health and safety at work, environmental protection, quality assurance) and as regards the precise determination of the goals of the training. The new regulation will also have a strong impact on the training delivered at central venues and vocational colleges, though no major problems are anticipated in this respect. The Federal Institute for Vocational Training is currently working in association with the social partners to draw up a manual to help employers implement the new provisions.

11.3. Updating the standards for the advanced qualification of state-certified *Polier*

Parties involved in the updating process

The following institutions and individuals were involved in the various stages of the process to update the advanced training regulation governing the *Polier* qualification:

(a) Sector federations and trade unions

(i) employers: *Hauptverband der Deutschen Bauindustrie*,

(ii) trade union: *Industriegewerkschaft Bauen - Agrar - Umwelt*,

(b) Apex organisations of the sector federations, the competent agencies and the trade unions:

(i) business community: *Kuratorium der Deutschen Wirtschaft für Berufsbildung* (KWB),

(ii) chambers of commerce and industry: *Deutscher Industrie- und Handelstag* (DIHT), which the Vocational Training Act cites as examining body,

(iii) chambers of crafts: *Deutscher Handwerkskammertag* (DHKT), which is also an examining body for the *Polier* qualification:

(iv) trade unions: *Deutscher Gewerkschaftsbund* (DGB), representing sector trade unions, and *Deutsche Angestelltengewerkschaft* (DAG), representing white-collar employees,

(c) Federal level:

(iii) Federal Ministry of Education and Research (BMBF),

(iv) Federal Institute for Vocational Training (BIBB),

(v) Experts acting on behalf of the social partners.

Altogether, the advisory committee was composed of some 14 individuals (including experts).

The individual steps in the updating procedure

The procedure for updating the advanced training for qualification as a *Polier* complied largely with the recommendations on criteria and procedures for the issuing of advanced training regulations laid down by the Board of the Federal Institute for Vocational Training in 1976.

Preliminary procedure

Ascertainment of a need for the qualification and submission by the social partners of an application for an advanced training regulation.

Development and co-ordination phase

First the application was subjected to a hearing before the then Federal Minister of Education and Science (today: Federal Minister of Education and Research), in which representatives of the social partners and a representative of the Federal Institute for Vocational Training participated alongside officials from the various ministerial departments concerned. The decision on the key parameters and the subsequent procedure was taken with comparative ease for the following reasons:

1. The regulatory procedures and the general structure of the advanced training regulation had already been laid down in the recommendations of the Board of the Federal Institute for Vocational Training.

2. The 1977 advanced training regulation on the *Meister* qualification in industrial metalworking had served as a pilot for all subsequent regulatory procedures in the advanced training sector. This regulation was also taken as a guide in updating the training for the *Polier* qualification. Accordingly, the state-certified Polier qualification can be considered to be comparable in terms of status and standards to the state-certified Meister qualification in industrial metalworking.

This approach avoided the conflicts of principle which had often dogged the social partners in the past. However, the procedure was more straightforward for two further reasons:

- The federally regulated advanced training regulations generally lay down only the examination requirements, not the curricular structure of the training content. Determining the latter is a matter for the individual bodies offering the training; these are usually chambers.

- In the case of advanced training regulations the stipulations generally concern only the examination requirements for the specialised occupation-specific component of the

examination requirements for the specialised occupation-specific component of the training. The other two training components covered by the regulation, namely interdisciplinary competences and the ability to pass on occupational skills to others, are laid down on a broader level and apply to all qualifications within the occupational field concerned.

Because of this less complex situation, the advisory committee was able to reach common ground relatively quickly. The *Polier* qualification was divided into only three specialisms, namely building construction, construction finishing and civil engineering. The qualified *Polier* is trained to cope with a largish number of trades and occupations within his/her chosen specialism. One of the reasons for adopting this approach was that when working on a construction site the *Polier* has to organise the work of persons skilled in a number of different fields. The level of understanding of occupation-specific theory required to pass the examinations is therefore broader than for any single initial vocational qualification and also deeper in order to enable the *Polier* to carry out complex planning tasks unaided.

Experts acting on behalf of the social partners were present at the meetings of the advisory committee. If their expertise proved inadequate to clarify a matter, the committee consulted additional experts (e.g. by correspondence). The experts also went out into the field to see at first hand the work of the federations, familiarise themselves with where their interests lie and defend these during the negotiations. Generally speaking there are no established rules on the methods and instruments to be used for this exploratory work, and decisions thereon are taken on an ad hoc basis as required.

Working on the basis of the agreed positions, the Federal Institute for Vocational Training and the above-mentioned organisations then drew up an official draft document, communicated this for approval to the various ministerial departments and then submitted it to the Board of the Federal Institute for Vocational Training for further processing. The Board then invited the representatives of the *Länder* governments in its midst to comment on the document - the first time that the latter were officially involved in the process.

Adoption by decree and publication

The advanced training regulation was then adopted by decree and published by the Federal Minister of Education and Science in association with the Federal Ministry of Economics. From beginning to end, the procedure for producing the advanced training regulation for the *Polier* qualification had lasted just under one year.

Validation of examination standards

There is no procedure for validating the examination standards. The implementation phase is a matter of applying the provisions to day-to-day training practices.

Compromises reached and opinions on the final outcome

The outcome of the regulatory procedure, namely the advanced training regulation for the Polier qualification, was not controversial. Indeed, the procedure itself ensured a high level of acceptance for its results. This applies as much to the industrial sector as to the craft sector, the Polier qualification being classified as both an industrial and a craft qualification.

Problems in implementation

A typical problem arising in the implementation of advanced training regulations at Meister level in the industrial sector is the quality of the training delivered, which depends heavily on the occupational expertise and training skills of the staff delivering the training. Many such training staff carry out their training duties as a sideline alongside continuing to work on their regular jobs and lack the pedagogic professionalism expected of full-time training personnel.

12. Case study on the health care occupations

Initial and advanced training for occupations in the health care sector occupies a rather special position within the vocational training system in Germany. There are currently 68 different initial vocational qualifications which can be attributed to level three of the ISCED system. There are also 66 advanced vocational qualifications, though not all of these could qualify as level four qualifications under the ISCED system. In general terms it is true to say that this occupational field shows a major lack of uniformity and transparency, the reasons for these shortcomings being attributable to historical developments and the current legal situation.

In view of this overall context, it would not make much sense for this case study to be restricted to one particular initial or advanced vocational qualification. Instead, the health care occupations will be taken here as an example illustrating the process which in future is to lead to a uniformly regulated carer qualification falling within the purview of the Vocational Training Act. First, though, it is worthwhile to examine some particular features of the training for initial and advanced qualifications in the health care sector.

12.1 Particular features of the training for initial and advanced qualifications in the health care sector

The confusion in this field starts with the fact that there is no definition anywhere of what health care occupations actually are. For most official purposes, the health care sector is counted as belonging to the personal services sector. The main fields of employment have traditionally been in primary care (e.g. medical doctor's auxiliary), diagnostics (e.g. medico-technical assistant), care (e.g. nurse, nursing auxiliary, gerontological carer) and rehabilitation (e.g. physiotherapist). Today it is appropriate to add the various occupations concerned with disease prevention (e.g. assistant dietician), social support and empowerment (e.g. educator) and in some respects also occupations concerned with institution management and domestic economics(on the following see in particular *Bundesinstitut für Berufsbildung* 1995, Meifort 1999).

Regulatory diversity

The above-mentioned 68 initial vocational qualifications are governed by a total of 177 regulations of diverse legal provenance:

- federal occupational legislation (10 pieces of legislation for 16 health care occupations),
- regulations adopted under *Länder* law (152 regulations for 37 occupations),

- the Vocational Training Act (3 health care occupations), and
- the Craft Regulation Code (12 related occupations, e.g. optician).

Although more and more statutory instruments concerning occupations in the health care and social services sector are today seeking guidance from the Vocational Training Act on certain of their provisions, a major difference still remains: Apart from the federal vocational legislation, there is no nationally valid, binding legal framework to lay down any uniform minimum standard for initial vocational training in this field. In numerical terms it is *Länder* legislation which predominates in the health care field. Yet except in the fields of caring for the elderly and social education, there are no initial vocational qualifications which are officially recognised in all of Germany's 16 *Länder*.

At the advanced training level, the diversity in terms of regulatory differentiation is even greater. There are at least five statutory instruments at play here:

- the Vocational Training Act, providing for nationally regulated qualifications under § 46.2;
- regulations issued by the chambers under the provisions of § 46.1 of the Vocational Training Act;
- regulations issued by the *Länder* governments;
- special advanced training legislation for health care occupations;
- recommendations issued by other agencies (e.g. the German Hospitals Association).

Altogether the sector has 105 advanced training qualifications and 212 regulations. Most advanced qualifications are regulated by the Länder, the next biggest category being those regulated by the chambers. The past few years have also brought the introduction of at least three advanced training regulations developed at national level under the provisions of § 46.2 of the Vocational Training Act.

Competing administrative powers

One of the reasons explaining this confusing diversity of statutory provisions is that the competence to regulate in the field of initial and advanced training is normally spread over several federal and *Länder* ministries. Legislation applicable to health care occupations is the responsibility of the Federal Ministry of Health; that applicable to social services occupations is the responsibility of either the Federal Ministry for Women, Youth, Family Affairs and Senior Citizens or the Federal Ministry of Labour and Social Affairs. But as the boundaries between the health care system and the social services system become increasingly blurred and in some cases even imperceptible, the matter of who holds competence for what has become a problem. Moreover, at the level of the individual *Länder*, there is no standard formula for dividing responsibility for health care and social services occupations between the various ministries. In many cases, for reasons of professional competence on the one hand

and education policy-making powers on the other, there is a dual responsibility incumbent on both the social services ministry and the education ministry.

Different standards in initial training delivery

It is not only the legal foundations for regulating on qualifications which are highly diverse: so too is the implementation of the training regulations. Wherever an initial vocational training is not delivered by the tertiary sector it counts as falling within the upper secondary sector of the education and training system. The training is provided at various types of specialised vocational college depending on the eligibility conditions imposed by the Federal Government or the Länder governments for the course concerned. Although the training is declared as being a college-based course, this fact does not automatically trigger application of the training quality standards laid down in the education legislation of the *Länder*. Indeed, there are many private-sector providers of training for the health care sector whose activities are not subject to the provisions of *Länder* education legislation. Additionally, there are no regulations at all to govern the component of the training carried out outside the college in a relevant health care institution - this being equally true for both public-sector and private-sector providers. In practice, this has resulted in the emergence of very different training quality and standards - even for federally regulated qualifications such as the carer qualification - training quality and standards which differ very substantially from one Land, one college and one hospital to another.

In some cases the *Länder* governments lay down not only the admission requirements for and the duration of initial and advanced training courses but also their contents and examination requirements. Where this is not the case and the latter two features are laid down by the individual training provider, major differences may exist in the training simply as a result of different perceptions of the human being - for example between religious and secular care institutions.

Mechanisms and initiatives to standardise qualifications

Despite this lack of uniformity and transparency, mechanisms and initiatives to standardise the qualifications do exist. It is generally true to say that uniformity in health care qualifications is greater, the closer the occupation concerned is associated with medical and clinical functions. Clearly physicians and their professional bodies are particularly keen to see quality and transparency in the training sector because qualified health care workers directly support them in fulfilling the mandate imposed on them by their own profession.

As far as the other qualifications are concerned, it is not necessarily the case that the Federal Government is keen to standardise or is actually standardising the qualifications regulated by the Länder. The *Länder* are seen to have justifiable regional interests which they sometimes pursue with considerable vigour. Some *Länder* have even taken on as their own the training standards (e.g. admission conditions, duration) already applied by established providers of initial and advanced training. Yet there are also initiatives and decisions aiming to harmonise

the regulations issued by the *Länder*. These are being supported by the Standing Conference (KMK), the Study Group of Chief Medical Officers (AGLM) and the Conference of Ministers of Social Affairs and Health in the *Länder* governments.

Standardisation effects can also be brought about by the funding support arrangements provided for in the Labour Promotion Act (AFG). For example, to qualify for funding from the labour administration, training courses must have obtained official recognition from the Federal Employment Service (BA). Generally speaking, the AFG, by virtue of its role as a major mechanism for funding training in this sector, has taken on such an importance here that it today functions more or less as a surrogate for the Vocational Training Act.

12.2. Measures and procedures to develop the carer qualification within the framework of the Vocational Training Act

Acting on a concern to "dualise the care occupations", in March 1999 the Board of the Federal Institute for Vocational Training recommended that a federally regulated initial qualification as carer be established in conformity with the Vocational Training Act (*Bundesinstitut für Berufsbildung* 1999). The issuing of the recommendation had been preceded by a variety of activities initiated by different institutions and interest groups over a period of ten years (for more on the following, see Meifort 1998).

Activities to establish a carer qualification under the Vocational Training Act

The Federal Institute for Vocational Training first considered establishing a carer qualification in compliance with the Vocational Training Act as a means of improving the initial vocational training situation in the wake of a recommendation made in 1989 by the Board of the Institute concerning a concept for advanced training to meet the needs of neighbourhood social services centres. The Board had already drawn attention at the time to the shortage of trained personnel capable of providing care for needy persons in their own homes. Taking the concept further, mainly in anticipation of the introduction of legislation making long-term care insurance compulsory but also because of foreseeable manpower difficulties in the home care sector and the groundwork already laid by its own recommendation, in the early 1990s the Institute drew up a training course for a carer qualification which met the requirements of the Vocational Training Act. In 1994 this conceptual work was embraced by the debate on intensifying initial vocational training efforts, and in spring 1995 the German Trade Union Confederation (DGB) and the Confederation of German Industry (BDA) took the initiative for including it in the Federal Chancellor's multipartite discussions being held at the time to "strengthen vocational training and improve the supply side of vocational training". One year later, in February 1996, the Board of the Institute adopted a joint recommendation on vocational training for qualifications in the health care sector. This recommendation also put the case for establishing a corresponding occupation recognised within the meaning of the Vocational Training Act. The recommendation, however, met with unanimous rejection by the

representatives of the *Länder* within the Study Group of Chief Medical Officers. In the same year, 1996, the Federal Ministry of Education and Research instructed the Federal Institute for Vocational Training to draw up a training profile for a carer qualification under the Vocational Training Act. Since mid-1998 the social partners have been meeting to discuss the key parameters for such a qualification. In March 1999 the Board of the Institute reiterated and reinforced its original recommendation on the matter.

Procedure for establishing the carer qualification

There is normally no standard, transparent procedure for developing qualifications falling within the regulatory purview of federal or *Länder* occupational legislation. Instead, the decision-making process and the involvement of the parties concerned therein is geared heavily to complying with formal, statutory rights and responsibilities coupled with seizing favourable political opportunity. Now that the recommendation to establish a carer qualification within the framework of the Vocational Training Act has been tabled, the procedure applicable is the usual procedure for developing initial vocational qualifications agreed on between the social partners and the Federal Government. Since the discussions on the key parameters commenced in 1998, this has also meant that new study groups, lobbying groups and other alliances have meanwhile been formed with a view to supporting or preventing the establishment of this new qualification within the envisaged legal framework.

Considerations relating to a new initial vocational qualification in health care

The Federal Institute for Vocational Training published a set of considerations concerning a three-year initial vocational training in health care leading to the carer qualification (Meifort/Mettin 1998). The reasons listed for making the training course a three-year course were the following:

- In order to qualify as a carer within the meaning of the Long-Term Care Insurance Act, the holder of the qualification needs a specialised training not only in social services and home economics but also in the medical and general care field. This already broad field, which is further widened by the fact that the qualified carer must be capable of caring for persons in all categories of age and disadvantage within the population, can only be effectively covered as a specialised area of skill if the duration of the training allows adequate time for both theory and practice.

- The envisaged occupational profile makes high demands on the holder of the qualification. The skills to be acquired not only relate to medical care, social support, home economics and to a certain extent social empowerment but also cover a range of core competences (e.g. ability to communicate, to promote mobility, to cope in a very wide range of different domestic and care situations, to empathise with different categories of client and different personality structures, to develop problem-solving strategies, etc.).

- The majority of the holders of the qualification will be employed in the expanding home care sector. The particular difficulty of the job can be deduced from the fact that in some *Länder* advanced training courses already exist in out-patient care of the sick and the elderly (care in the community) for persons employed in home care work who already hold a corresponding initial vocational qualification. The advanced training is normally provided in the form of a one-year full-time course or a two-to-three-year part-time course attended in parallel to regular employment. The admission requirements are an initial vocational qualification plus at least two years of occupational experience. This situation makes it clear that the initial vocational qualification for a considerably more extensive job profile could hardly be acquired in a shorter period of time.

- The new qualification must not be a superficial, fast-track affair as a less well qualified worker is of no financial benefit as such a person requires a greater investment in terms of supervision, instruction and work planning and co-ordination than a fully qualified carer entitled by statute to a somewhat higher salary grading.

- There is already by no means a shortage of 'auxiliary' or assistant qualifications in the care field. One such qualification is the state-recognised qualification as a health care auxiliary, another is the auxiliary in caring for the elderly. The practical value of these qualifications, however, is highly controversial. Moreover, there are already enough low-skilled persons employed in the community care sector.

- From the viewpoint of encouraging skilled female employment, the qualification has to entail a three-year training in order to ensure that it is recognised and given an appropriate status within the system already in place. Moreover, a shorter training than is required for the college-based care qualifications would lead to a further loss of status for all (typically female) care qualifications.

- In light of the policy debate on possibilities of upgrading the status of the dual system of vocational education and training, it would be counterproductive if a field with such significance for the future as health care and social services were to introduce a new qualification of a standard lower than that required for the existing college-based care qualifications. This would substantially lower the standing of a dual-type qualification in this field.

The new training course is to be developed as a broad-based course offering a comprehensive training in caring for and supporting people of all age and disadvantage groups but be particularly geared to the largest field of employment, namely home care. Given this context it is believed that a subdivision of the training and qualification into specialisms would not be advisable as this would restrict the job mobility and flexibility of the holders of the new qualification.

Part IV

13. Positive and negative aspects of the German classification system

Drawing on Finegold/Keltner, the German classification system is assessed here on the basis of five criteria which have proved to be particularly helpful for the purposes of international comparisons of how well vocational standards systems function (Finegold/Keltner 1997):

- openness of access to certified vocational qualifications,
- breadth of the skills developed,
- lateral (horizontal) mobility of the qualification holders,
- upward (vertical) mobility of the qualification holders,
- responsiveness to changing skill requirements.

The assessment must also take account of the fact that in some respects these criteria may be at odds with each other. For example, the breadth of the skills developed may have a negative impact on access to certification, or lateral mobility on the part of the qualification holder may operate at the expense of that person's upward mobility. The following analysis refers mainly to initial and advanced vocational qualifications which are regulated at national level because these account for the quantitatively largest component within the German classification system.

13.1 Openness of access to certified vocational qualifications

Although access to an initial vocational training within the dual system is largely unrestricted in terms of legally anchored eligibility conditions, permission to sit the compulsory final examination presupposes that the aspiring candidate has completed several years of formalised training or at least a multi-year period of "relevant" occupational experience. No provision is made for obtaining certificates for individual sub-qualifications and accumulating these to earn the full qualification. This arrangement can impede access to a certified vocational qualification, particularly for adults with no formal vocational qualification.

In recent years there has been increasing debate in vocational training circles in Germany on whether the various initial vocational qualifications are sufficiently differentiated in terms of standard to also allow low-attaining youngsters to obtain a vocational qualification. Some 12 to 14 per cent of young people currently obtain no formal vocational qualification, a figure which is exceptionally low by international comparison. Nevertheless, thought is being given

to how new areas for sustainable employment involving largely practical skills can be brought into the initial vocational training system (BMBF 1997). The generally held view here is that vocational qualifications for occupations with a stronger emphasis on practical skills should not take less training time to acquire.

The principle of separating the acquisition of skills from access to examinations or certification has essentially been applied in the advanced training regulations. Access to certification is facilitated in many such advanced training regulations by an arrangement whereby the examination is subdivided into several sections which have to be taken within a certain time frame but are otherwise independent of each other in terms of the time they are tackled. Admission to the examination is, however, conditional on the candidate having gained a multi-year period of relevant occupational experience at skilled worker level. Here too, consideration is being given to how the system can be made more accommodating. The idea is to attach less importance in future to formal access conditions without, however, losing sight of the ideal of having gained occupational experience. With less importance attached to formal conditions, a bigger part is to be played by credit systems acknowledging add-on qualifications held, continuing training modules undergone and skills acquired at work as being relevant to being granted admission to advanced-level vocational examinations (BMBF 1997).

13.2. Breadth of the skills developed

The German system of initial vocational training clearly endorses the establishment of broad-based qualifications. By involving the Federal Government, the *Länder* governments, employers' federations and trade unions in the process of drawing up the regulations to govern such training, the system has helped establish the attainment of an initial competence to act autonomously within one's occupational environment as the uniform and standard goal to be aspired to by all initial vocational training programmes. At skilled worker level, this so-called action competence is understood to mean the ability to plan, execute and monitor skilled work in an autonomous manner. This calls for the development not only of occupational expertise but also of strategic, social and personal skills. Moreover, through its institutionalised regulatory procedure, which is supported by the research activities of the Federal Institute for Vocational Training and experts representing the social partners, the system is able to disseminate best practice throughout each industry concerned and have this practice incorporated into the products of its own regulatory activity. Comparable mechanisms exist at advanced training level, having the effect here of ensuring broad profiles for supervisory and middle management functions.

13.3 Lateral mobility of the qualification holders

A positive feature of the German classification system is that it attaches particular attention to the marketability of vocational qualifications. Their marketability is enhanced firstly by the fact

that the final examinations are externally conducted examinations. This gives the qualifications a high level of credibility and creates mutual confidence in the value of the certificates. Marketability is further enhanced by the standardised frame of reference applied to regulating the training. This makes it possible for employers to organise their work processes in line with the skilled labour entering the market or to call for changes to the training regulations if this is no longer possible. On the other hand, holders of a vocational qualification have good prospects of finding employment in similar positions in other companies or organisations. This prospect also operates as a major incentive for undergoing a formal vocational training.

A negative feature, however, is that because under Germany's federal administrative system education and training policy is a matter for the *Länder* governments, the frame of reference does not embrace all vocational qualifications at initial training level and in fact leaves out some important fields of training, e.g. those catered for by vocational colleges. A further negative feature is that for the same reason the initial vocational training system has only tenuous links with the upper secondary segment of the general education system. In view of the general rise in standards imposed on dual-system training and the requirement for such training to also develop core skills, placing vocational qualifications on an equal footing with general education qualifications is considered to be a justifiable proposition. The Federal Government and the social partners are therefore calling upon the *Länder* governments to treat young skilled workers who hold a lower secondary education qualification plus an initial vocational qualification in the same way as they treat young people with an intermediate secondary education qualification for the purposes of granting access to further education, i.e. without imposing any additional admission conditions on the former category of applicants (BMBF 1997).

13.4 Upward mobility of the qualification holders

The standard of attainment reached with an initial vocational qualification provides a sound basis for holders of the qualification to be upwardly mobile. Because of the requirement to become competent to act autonomously in one's occupational environment, core skills are developed throughout the initial training which a subsequent advanced training can further build up to qualify the holder for middle management functions. Although the advanced vocational qualifications system has its own regulatory mechanisms which are less standardised than those governing initial training, the two sets of mechanisms are closely co-ordinated.

A negative feature here is that no standard advanced vocational qualification system yet exists at national level. In the craft sector, the Meister qualification has traditionally existed as an advanced qualification obtainable outside the tertiary sector in any craft occupation. A system offering a comparable advanced qualification obtainable in any occupation in the industrial and services sector is still in the process of being established and/or expanded. These sectors currently offer instead a wide range of advanced vocational qualifications which are regulated

by the competent chamber. The prospects for upward mobility will be further improved when the work already under way to establish advanced vocational qualifications with equivalent status to qualifications issued by specialised institutes of higher education comes to fruition. Accordingly, one of the main aims of this reform process is to review and revise the advanced training regulations in close cooperation with the social partners. Quality, transparency and marketability will remain the predominant considerations here. A further endeavour aiming in the same direction envisages consolidating the vast number of chamber-issued regulations in a smaller number of flexibly structured and nationally applicable regulations to be issued by the Federal Government (BMBF 1997).

Like its counterpart at the initial training level, the advanced vocational training system has only relatively tenuous links with the upper echelons of the general education system. The Federal Government is therefore calling on the *Länder* governments to grant holders of advanced vocational qualifications access to higher education without placing any objectively unjustifiable obstacles in their path. This would signify acknowledging these advanced vocational qualifications as being equivalent to qualifications obtained via the academic track of the general education system (BMBF 1997).

13.5 Responsiveness to changing skill requirements

Initial vocational training regulations are developed in compliance with a highly institutionalised procedure during which different, often divergent interests have to be reconciled. The aim of this extensive procedure is to ensure that employers, i.e. the providers of initial vocational training, can accept and implement the resulting new or revised training regulations. A rapid response is further hindered by the fact that concern for quality standards has induced a practice whereby stipulations are made not only concerning the proficiency to be demonstrated in the examination but also concerning the structure of the curriculum.

These disadvantages, however, are at least compensated by a number of advantages. As most initial vocational training in Germany is provided by employers, their own vested interest in keeping their operations up to date helps ensure that the training regulations respond promptly and continuously to changing skill requirements. This concern is accommodated on the one hand by the fact that the training regulations stipulate only minimum training standards which do not hinder employers from training to higher standards if their operations require such higher standards and on the other by the fact that the training goals are being worded in terms more accommodating of technological and organisational change and modern training regulations, alongside their catalogue of mandatory occupation-related and core skill requirements, offer employers a wide range of training options with more flexible timing schedules. Finally, the Federal Government and the social partners have agreed on a maximum time deadline for completing the procedure to produce training regulations.

Whereas the close involvement of the relevant social forces is highly valuable in ensuring that the resulting revised training regulations will be acceptable, this involvement can be equally

disadvantageous in the matter of establishing completely new qualifications and the corresponding new, state-recognised occupations. The problem here is that as federations and other concerned organisations are usually not formally constituted until new areas of business are firmly established as such, in many cases partner organisations which could contribute to developing new training regulations do not exist at the time when their involvement is sought.

14. Aptitude of the classification system for certifying knowledge and skills acquired in the past or in non-formal circumstances

To obtain an initial vocational qualification one has to undergo a formalised training involving both in-company and college-based learning and then pass the final examination. Because of this requirement, the German classification system is not, in principle, suitable for certifying knowledge and skills acquired in the past or in non-formal circumstances. Nevertheless the Vocational Training Act does allow for the possibility of having informally acquired knowledge and skills recognised for the purpose of taking the final examination and, provided the examination is passed, obtaining a vocational qualification. It is important to note, though, that such informally acquired knowledge and skills are not recognised as entitling the holder to be exempted from taking any part or all of the final examination (Collingro et al. 1997).

The condition for being admitted to the final examination under this waiver is being able to demonstrate having carried out skilled work in the occupation to which the examination relates. The skilled work concerned must have been carried out for a period at least twice as long as the duration prescribed for the regular initial training leading to the qualification concerned. This period can be shortened under certain circumstances. In most cases, candidates choose to undergo special courses preparing them for taking the examination as an external candidate; such courses are offered by a variety of training providers (Hecker 1993). The uptake for this alternative path, however, is generally limited.

For the purposes of obtaining advanced vocational qualifications such as the Meister or the Fachwirt, the Vocational Training Act and the Craft Regulation Code recognise informally acquired knowledge, skills and experience as a major eligibility criterion for admission to the final examination. The standard requirement here is three years of work in a relevant occupation after obtaining the initial vocational qualification. A candidate who does not hold the recognised initial qualification is required to have worked in the occupation concerned for at least six to eight years. No further formal eligibility conditions are imposed, but most candidates in fact choose to undergo an extensive course to prepare themselves for the examination.

Generally it is true to say that only some segments of the German classification system are suitable for certifying knowledge and skills acquired in the past or in non-formal

circumstances as the award of an initial or advanced vocational qualification is always conditional upon the candidate having passed an external examination held by the relevant chamber. This condition is a logical consequence of the goals and functions of the classification system, namely to ensure all-round confidence in the quality of the qualification. This is particularly important within the framework of the German vocational training system because a substantial part of all initial and advanced training takes place by means of a learning process at the workplace within a corporate environment.

No provision is made for certifying and recognising knowledge acquired in the past for the purposes of obtaining the qualifications awarded by the various types of vocational college. Admission to the final examination in these cases is conditional on the candidate having attended the relevant college courses.

Bibliography

Adler, T.; Benner, H. (1995): Regelung der Berufsausbildung in der Bundesrepublik Deutschland. In *Ausbildungsberufe im Wandel*, ed.: Bundesinstitut für Berufsbildung. Der Generalsekretär, Ergebnisse, Veröffentlichungen und Materialien aus dem BIBB, xeroxed MS.

Benner, H. (1995): *Ordnung der staatlich anerkannten Ausbildungsberufe*. Ed.: Bundesinstitut für Berufsbildung. Der Generalsekretär, Bielefeld.

BMBF 1997 (= Federal Ministry of Education and Research): *Reformprojekt Berufliche Bildung. X*eroxed MS, Berlin and Bonn.

Bundesinstitut für Berufsbildung. Der Generalsekretär (ed.) 1992: *Weiterbildungsberufe – Berufe mit Zukunft*. Ergebnisse, Veröffentlichungen und Materialien aus dem BIBB, xeroxed MS, Berlin and Bonn.

Bundesinstitut für Berufsbildung. Der Generalsekretär (1995): Vorlage zur Sitzung 3/95 des Unterausschusses 2 – Strukturfragen der beruflichen Bildung – am 22. November 1995 in Bonn, Top 3 – Beratungsvorlage zu dem Thema Gesundheitsberufe, mimeographed manuscript.

Bundesinstitut für Berufsbildung. Der Generalsekretär (ed.) 1996: *Entwicklungschancen durch Weiterbildung*: Weiterbildung und Alternativen. Ergebnisse, Veröffentlichungen und Materialien aus dem BIBB, Berlin and Bonn.

Bundesinstitut für Berufsbildung. Der Generalsekretär (1999): Vorlage zur Beschlußfassung zur Sitzung 1/99 des Hauptausschusses am 18./19. März 1999 in Bonn, mimeographed manuscript.

Bundesausschuß für Berufsbildung (1976): Empfehlungen über Kriterien und Verfahren für den Erlaß von Weiterbildungsordnungen und deren Gliederung, In *Berufsbildung in Wissenschaft und Praxis*. No. 2, p. 4-5.

Bundesinstitut für Berufsbildung (1997): Kriterien der Arbeitgeber vom Januar 1997 und der Gewerkschaften von November 1996, Vorlage für den Hauptausschuß vom 19.2.1997.

Cedefop – European Centre for the Development of Vocational Training; Collingro, P.;, Heitmann, G.; Schild; H. *Identifizierung, Bewertung und Anerkennung von früher und informell erworbenen Kenntnissen – Deutschland*. Luxembourg: EUR-OP 1997.

Finegold, D.; Keltner, B. (1997): *A Cross-National Perspective on Skill Standards Systems.* Conference paper.

Hecker, U. (1993): Lehrgänge zur Vorbereitung auf die Externenprüfung – Unterstützung beim nachträglichen Erwerb des Berufsabschlusses, In *Berufsbildung in Wissenschaft und*

Praxis..Vol. 22, no. 3, pp. 32-37.

Hoch, H.D. (1999): Generalisten oder Spezialisten - *Neue Portraits für die Bauberufe* -Referat auf den Hochschultagen Berufliche Bildung am 23. September 1998 in Dresden. MS.

KMK 1992 (= Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany): *Rahmenvereinbarung über die Ausbildung und Prüfung zum technischen Assistenten/zur technischen Assistentin an Berufsfachschulen vom 12.6.1992.* Version dated 26.6.1998.

KMK 1997a (= Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany*): Handreichungen für die Erarbeitung von Rahmenlehrplänen der Kultusministerkonferenz für den berufsbezogenen Unterricht in der Berufsschule und ihre Abstimmung mit Ausbildungsordnungen des Bundes für anerkannte Ausbildungsberufe.* Bonn, xeroxed MS, version dated 12.6.1997.

KMK 1997b (= Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany): Rahmenvereinbarung über die Berufsfachschulen (Beschluß der Kultusministerkonferenz vom 28.2.1997), In *Berufsbildung*,.No. 45/1997, pp. 43-47.

KMK 1998 (=Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany): *Rahmenvereinbarung über Fachschulen mit zweijähriger Ausbildungsdauer, (Beschluß der Kultusministerkonferenz vom 12.6.1992 in der Fassung vom 2.10.1998)*,.Bonn, xeroxed MS.

Koch, Rita (1995) *Fünf-Stufen-Schema der EG von 1985 - Untersuchung über Auswirkungen der Zuordnung deutscher Berufsabschlüsse.* Institut der Deutschen Wirtschaft, Köln, xeroxed MS.

Letzner, S.; Tillmann, H. (1998): *Die Weiterbildungsregelungen der zuständigen Stellen. Ordnungsstruktur und Entwicklungstendenzen*, (ed.) Bundesinstitut für Berufsbildung. Der Generalsekretär, Wissenschaftliches Diskussionspapier, no. 33, Berlin and Bonn.

Marek, S.; Neumann, K.-H. (1999): *Qualifikationsangebote über berufliche Vollzeitschulen und Berufsakademien, Teil I: Berufsfachschulen.* Arbeitsgemeinschaft für angewandte Sozialforschung, Munich, xeroxed MS.

Meifort, B. (1998): *Warum ein BBiG-geregelter Pflegeberuf? Argumente für die Übernahme des dualen Systems in die Berufsbildung der Gesundheits- und Sozialpflege.* In Meifort, B., Mettin, G.: *Gesundheitspflegerin/Gesundheitspfleger – Überlegungen zu einem neuen Berufsbild für die Pflege nach BbiG.* (ed.) Bundesinstitut für Berufsbildung. Der Generalsekretär, Bielefeld.

Meifort, B. (1999): *Probleme der Verrechtlichung der Berufsbildung für Berufe im Gesundheits- und Sozialwesen.* In (ed.) Bundesinstitut für Berufsbildung. Der General-

sekretär: Berufsbildung und Beschäftigung im personenbezogenen Dienstleistungssektor, Wissenschaftliche Diskussionspapiere, Berlin.

Meifort, B.; Mettin, G. (1998): *Gesundheitspflegerin/Gesundheitspfleger – Überlegungen zu einem neuen Berufsbild für die Pflege nach BBiG.* (ed.) Bundesinstitut für Berufsbildung. Der Generalsekretär, Bielefeld 1998.

OECD (1999): *Classifying Educational Programmes*. Manual for ISCED-97 Implementation in OECD Countries, Paris.

Scholz, D. (1996): *Meisterregelungen.* In Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 5.10.3, p. 4, Cologne.

Stiller, I. (1995): *Verfahren zur Erstellung von Ausbildungsordnungen.* In Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 9.3.2, Cologne.

Tillmann, H. (1989): *Steuerung und Regelung der beruflichen Weiterbildung*,.Kurseinheit 2, Steuern und Regeln beruflicher Weiterbildung im Rahmen des Berufsbildungsgesetzes (BBiG), Fernuniversität – Gesamthochschule in Hagen.

Tillmann, H. (1995): *Weiterbildungsregelungen der Zuständigen Stellen.* In Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 5.10.1, p. 4, Cologne.

Tillmann, H. (1995): *Weiterbildungsregelungen des Bundes.* In Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 5.10.1, p. 4, Cologne.

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Introduction

Before discussing the matter in hand, we must put the term 'standards' in its Spanish context.

The origin of the term 'standards' lies in a field study of the economic, technological, labour and occupational aspects of the main sectors of the Spanish economy, conducted by the Spanish Office of Employment (INEM), which then identified the productive organisations' targets and the necessary professional proficiency to achieve them, in a process of 'functional analysis' of the technological, organisational and socio-labour aspects of qualifications.

The aforementioned professional proficiency is demonstrated by professional skills and/or standards that express what people must be able to do in existing and potential future working situations.

Two vocational training systems are based on this source of standards of required qualification or professional proficiency, both from the same point of view but under different conceptions.

On the one hand, the regulated vocational training system of the Ministry of Education and Culture (previously Science) (MEC) conducted, partly following the model of analysis carried out beforehand by INEM, a functional analysis of the productive process in the organisational (functions), technological (subprocesses), socio-labour and prospective variables, identifying from the most elementary subfunctions and essential activities to achieve production targets to the professional activities and skills that people must be able to perform and have, grouping them in professional fields and units that could give rise to coherent education programmes.

This grouping gave rise to the so-called 'professional profiles', which acted as a reference for the qualifications that would later make up the Catalogue of Professional Qualifications (CTP), consisting of 24 professional families (see Appendix 1), 2 of which are still being developed. In this respect, the professional qualifications of this system accredit people with a certain skill and a certain level of qualification, which we shall discuss further below.

Furthermore, the occupational vocational training system, of the Spanish Office of Employment (a subsidiary of the Ministry of Labour and Social Affairs) follows a similar process to that followed by the education authorities, defining so-called occupational profiles. The definition and regulation of these occupational profiles are included in the Professional Proficiency Certificates, grouped in the so-called Compendium of Professional Proficiency Certificates (RCP), consisting of 26 professional families (see Appendix 2).

These Professional Proficiency Certificates are structured in the same way as the vocational training qualifications of the MEC, i.e. they are structured in skill units drawn up according to qualification standards, and, although not regulated at present, are expected to be validated with the regulated vocational training qualifications mentioned above.

To summarise, before discussing the questions below, professional levels are directly related to the productive environment i.e. to the functions performed in the job, while professional and occupations profiles respond to a conception of the profession's content, with the former broader than the latter. Occupational professional profiles are directly related to a job or specific occupation (hence their name), whereas professional profiles are targeted at a broader working environment, with the consequent breadth of occupations and qualifications this implies.

Another of the sources that include the concept 'standards' is collective bargaining.

With the repeal of the old in-house labour rules that previously governed labour relations, and the gradual application of new collective agreements, the professional classification underwent an important, albeit insufficient, change.

Professional categories - clear representatives of the definitions of tasks to be performed in jobs – were replaced by so-called **'professional groups'**. These professional groups define the level of qualification of the people that make them up, although the content of this level of qualification is never specified. This type of classification has become a way of structuring professional classification and, with it, labour relations in a hierarchy. This will be discussed at further length below.

It is worth mentioning that, although the concept of "professional group" is still being assimilated and applied by some productive sectors (some have not yet adapted the old rules to the current standards of professional classification in accordance with the existing "*Acuerdo de Cobertura de Vacíos*"), progress has been made in some sectors, conceiving of professional groups as professional classification systems that define levels of qualification.

In this respect, given the large variety of professional classifications (a consequence of the large variety of collective agreements), we are going to use the criteria of professional classification included in the "*Acuerdo de Cobertura de Vacíos*" as a reference framework to describe the key features that make up this classification. Nevertheless, it must be made very clear that this agreement's classification system is not a legitimate representation of the existing classification systems in the different collective agreements currently in force in Spain.

Figures 1 and 2, respectively, illustrate and summarise the procedure for drawing up occupational and professional profiles and the different conceptions with which each institution defines what, in this case, we call standards and the equivalences between them.

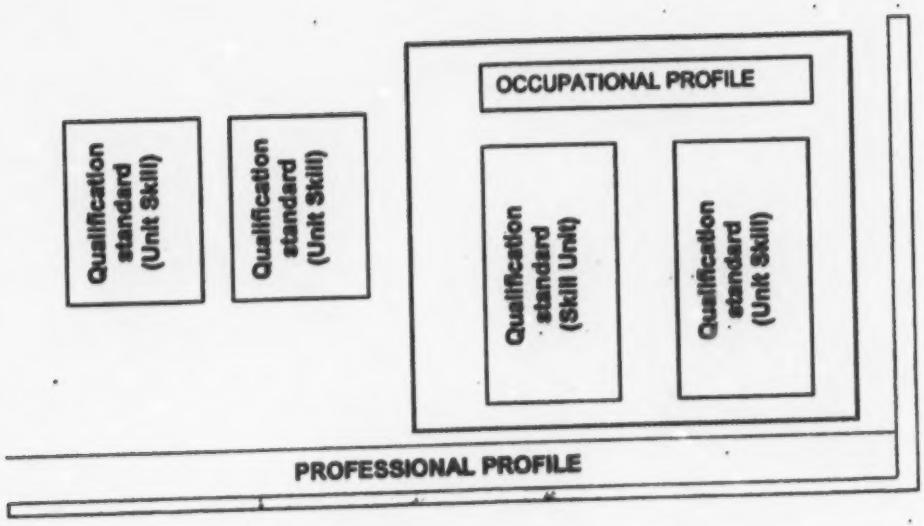

Figure 1: Schematic simplification of the procedure for drawing up professional and occupational profiles

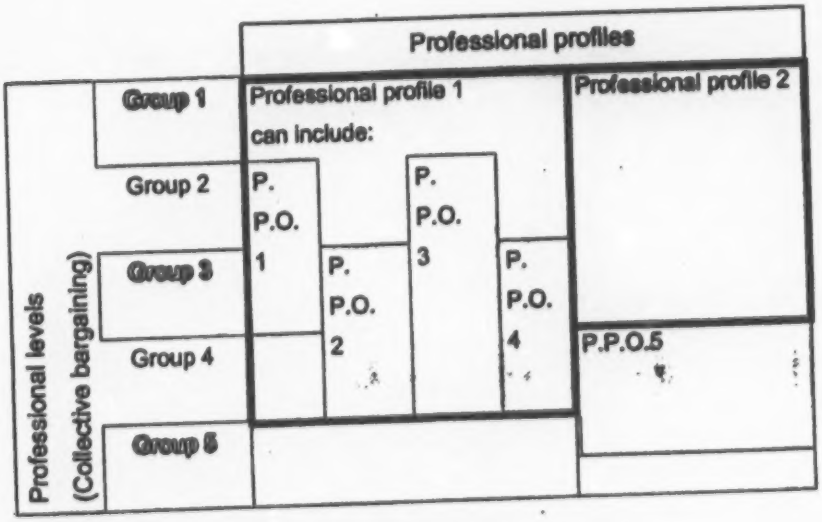

Figure 2: Relations between the three conceptions of the term 'standards'
Key: P.P.O.: Occupational profile (INEM)
Professional levels: Collective bargaining
Professional profile: MEC

The relations between the three structures mentioned above do not exist in Spain at present.

No system has been regularised to relate the three qualification/classification systems. There is no official system for the regulation and certification of professional standards suitable for both the education system and the labour market. As shall be seen below, the National System of Qualifications (SNC), through the National Institute for Qualifications, is the tool that must enable this regulation/relation/classification and certification of vocational standards in Spain.

Appendix 3 includes the case of the Basque Country, which has developed an Institute for Qualifications and has started to define a qualification classification system, and the methodology and necessary components to implement it. This has been put on hold for the time being, pending decisions about the implementation of a National System of Qualifications. Another similar experiment is being carried out in Galicia, although it is at a more embryonic stage.

15. Information from official documents

Question 1:

Describe in short the 'history' on the (National) Classification System(s) of vocational standards in operation in your country. Which interests were taken into account? Which aspects or earlier systems were, or were not, implemented into the system in operation?

The origin of the term 'standards' lies in a field study of the economic, technological, labour and occupational aspects of the main sectors of the Spanish economy, conducted by the Spanish Office of Employment (INEM), which then identified the productive organisations' targets and the necessary professional proficiency to achieve them, in a process of 'functional analysis' of the technological, organisational and socio-labour aspects of qualifications.

The aforementioned professional proficiency is demonstrated by professional skills and/or standards that express what people must be able to do in existing and potential future working situations.

Two vocational training systems are based on this source of standards of required qualification or professional proficiency, both from the same point of view but under different conceptions.

On the one hand, the regulated vocational training system of the Ministry of Education and Culture (previously Science) (MEC) conducted, partly following the model of analysis carried out beforehand by INEM, a functional analysis of the productive process in the organisational (functions), technological (subprocesses), socio-labour and prospective variables, identifying

from the most elementary subfunctions and essential activities to achieve production targets to the professional activities and skills that people must be able to perform and have, grouping them in professional fields and units that could give rise to coherent education programmes.

This grouping gave rise to the so-called **'professional profiles'**, which acted as a reference for the qualifications that would later make up the Catalogue of **Professional Qualifications in the Educational System** (CTP), consisting of 24 professional families . In this respect, the professional qualifications of this system accredit people who finishes the educational way with a certain skill and a certain level of qualification.

Furthermore, the occupational vocational training system, of the Spanish Office of Employment (a subsidiary of the Ministry of Labour and Social Affairs) follows a similar process to that followed by the education authorities, defining so-called **occupational profiles.** The definition and regulation of these occupational profiles are included in the Professional Certificates, grouped in the so-called Compendium of Professional Certificates (RCP), consisting of 26 professional families .

These Professional Certificates are structured in the same way as the vocational training qualifications of the MEC, i.e. they are structured in skill units drawn up according to qualification standards, and, although not regulated at present, are expected to be validated with the regulated vocational training qualifications mentioned above.

To summarise, before discussing the questions below, the origin of the professional levels are directly related to the productive environment i.e. to the functions performed in the job, while professional and occupations profiles respond to a conception of the profession's content, with the former broader than the latter. Occupational professional profiles are directly related to a job or specific occupation (hence their name), whereas professional profiles are targeted at a broader working environment, with the consequent breadth of occupations and qualifications this implies.

Both systems use these definitions to create their own educational supply, not as qualifications in the way the term is understood in another European countries.

Figures 1 and 2, respectively, illustrate and summarise the procedure for drawing up occupational and professional profiles and the different conceptions with which each institution defines what, in this case, we call standards and the equivalences between them.

There is no official system for the regulation and certification of professional standards suitable for both the education system and the labour market. As shall be seen below, the National System of Qualifications (SNC), through the National Institute for Qualifications, is the tool that must enable this regulation/relation/classification and certification of vocational standards in Spain.

At present, we are underway to create a National System of Qualifications (SNC), which would respond more exactly to what the question defines as a (National) Classification

System(s) of Vocational Standards.

This SNC was provided for in the 2nd National Vocational Training Programme, approved in 1998. According to the 2nd National Vocational Training (VT) Programme, this SNC should:

- Develop integration of vocational qualifications.
- Promote integration of the various ways of acquiring professional skills
- Integrate and regulate the VT supply

Therefore, the SNC is expected to become an institutional system of reference in order to:

- recognise, clarify and legitimate professional profiles (standards) and the skills required in the productive system.
- gear the planning and updating of vocational training supplies towards professional profiles and qualification needs.
- provide clear references with comprehensive legal provisions for the sectoral negotiation of agreements and professional classifications.
- provide references and accreditation units that enable professional evaluation and accreditation for the entire working population.
- provide employment references that increase the transparency of the sectoral, national and European qualification markets.

As can be seen, the SNC will be what could be called a National Classification System of vocational standards, and is intended to respond to (unify) the large variety of classification systems of vocational standards currently existing in our country. These include the Catalogue of Regulated Vocational Training Qualifications, the Compendium of Professional Certificates, or the different classifications resulting from collective bargaining.

In view of the current vagueness of the workings and criteria that will guide the action of the governing bodies of the SNC, we cannot define what type of interests will be taken into account or what aspects of the existing classification systems (Ministry of Education and Culture, Ministry of Labour and Social Affairs, collective agreements, "*Acuerdo de Cobertura de Vacíos*") will be maintained in the new system.

The figure below shows the *position* of the SNC between the qualifications systems used in education and the labour market, showing how it is expected to link the two together.

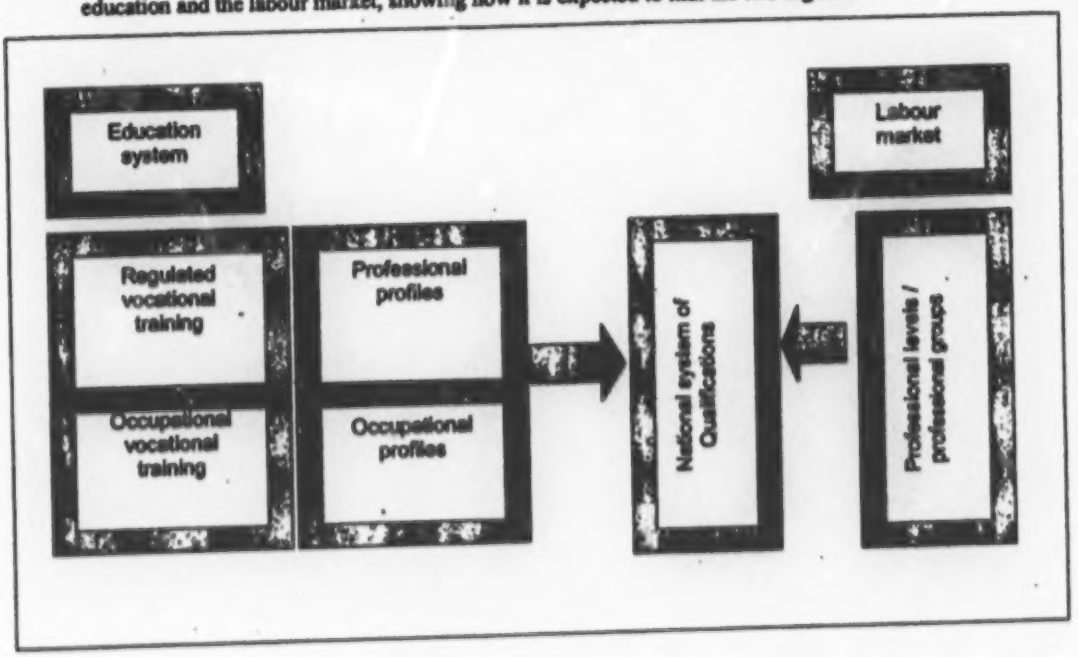

Figure 1: Schematic simplification of the procedure for drawing up professional and occupational profiles

Question 2

Which definition of standards do you use?

- **What is regarded as a standard in your country, expressed in a possible Format?**
- **What are the elements of standards (state of the art, relevance for the future)?**
- **Which types of standards are used (industry standards, enterprise standards, school-based standards) and are you using one or more standards?**
- **How to avoid bias (i.e. avoidance of bias and discrimination of the elements, and which procedures)?**

As was mentioned above, in Spain we have to consider so-called standards in terms of the educational system .

The titles of the skills that make up the different professional profiles, included in the Catalogue of Vocational Training Qualifications (MEC) or in the Compendium of Professional Certificates (INEM), are the so-called vocational standards, which can be - but are not necessarily - applied to all of a sector's productive organisations, incorporating a broad concept of professional proficiency.

These educational standards, according to the MEC, are established based on the definition of the professional functions and activities and the determination of the levels of achievement that they require to be performed. Thus, the determination of vocational standards is one of the keys to the system of vocational qualifications from the educational viewpoint. This system means making the acquisition of the professional skill established in the education system the main aim of the training process.

This profile consists of a series of actions and results that are **the expected conduct of people in the working situations** they must face in production, which have been called professional achievements.

The fundamental value of these professional achievements that must be attained in the field of technical work lies in a twofold virtue: while they are considered satisfactory and are applicable to all the sector's productive organisations that have similar production targets, relevant and significant skills are deduced from them, from which students' training programmes will, in turn, be deduced.

Each **professional achievement or skill title** includes a series of **"achievement criteria"** that determine the acceptable level of the result expressed by the achievement and provide a **precise reference for the evaluation of work in productive contexts. But they are evaluated in an educational context, not in a work context.** They also acts as a guideline

for the evaluation of professional skill in education centres. **Professional achievements are grouped into "skill units", each one of which is of value and significance in the job**, i.e. it makes sense for most of the sector's organisations and constitutes an **essential working "role"**. Each skill unit includes an **"professional domain"** or field of application for the professional achievements, which determines the equipment, materials, information, processes, etc. that have been identified, and are involved, in the productive system.

The training part of each of the programmes included in this documentation includes the **"minimum education"** prescribed for the entire Spanish state, the duration and content of whose qualifications are established and completed by the Ministry of Education and Culture.

The training programme is split into Professional Modules, intended to provide pupils with the professional skill characteristic of each qualification. The modules can be associated with a skill unit (the more specific modules) or with several of these units (the so-called "basic or transversal" modules). The training programme also includes a module of vocational training and guidance that is not directly related to professional skill.

The professional modules constitute the coherent units of specific vocational training that must be accredited and certified to obtain the qualification, and are considered equivalent to the terms "subject" and "area" used in general training. The elements of the curriculum that constitute a module are the aims, expressed in terms of terminal skills, evaluation criteria and contents. These components are formulated in such a way that, while determining the basic professional skill that can be required all over Spain, they can be adapted to the characteristics of the pupils and the centres' productive environment.

In accordance with the value and significance of the corresponding skill units in the job, the modular conception of training is the cornerstone of the new vocational training system because, besides adapting the pupils' training to the qualification requirements of the productive system, it also makes it possible to achieve two further crucial aims:

1. **to establish comparability and validation with industrial practice and occupational vocational training.** This, on the one hand, enables the adult population to **"capitalise"** on its professional learning and experience in the education system and, on the other, enables VT graduates to work in those activities that require certification from other government bodies.

2. to facilitate the creation of a modular system for the adult population, encouraging it to further its vocational qualification. The possibility of achieving this aim stems from the fact that the professional modules have been defined to obtain the professional skill of the corresponding units and these, in turn, are functions or "roles" with significance in the job.

This professional skill, mentioned above, must consider all the factors that make up the level-2 and 3 professional proficiency qualifications (*). These factors can be summarised as follows:

(*) The importance of each one varies depending on the level of qualification established.

Technical skills

Organisational and economic skills

Environmental co-operation and relationship skills

Troubleshooting skills

There is a mixture of different levels of skills and knowledge in the standards resulting from the analysis of productive processes, because in professional activities, in terms of individuals' contribution to the working of the productive system with an established organisation, skills of a different level are required, grouped together according to the essential role assigned.

In summary, the MEC, through the definition of the so-called **terminal skills** ([10]) of the standards or skill units (defined with their evaluation by the education system in mind) has selected the most significant and grouped them together, defining the professional profiles. These professional profiles were classified according to the professional and educational levels established in the 1990 Law on the General Regulation of the Education System (LOGSE), corresponding to levels 2 and 3 of the European Union in the directive "Comparability of vocational training qualifications between European Union member states" (85/368, 16/07/85 - DO L199, 31/07/85).

For its part, INEM based the definition of its Catalogue of Professional Certificates on:

- identifying an occupation's characteristic professional skills

- regulating occupational vocational training to guarantee more of these professional skills are acquired.

- making the professional certificate valid nation-wide, to increase labour-market transparency and labour mobility.

With regard to the first of these aims, **the occupation constitutes the basic unit of analysis and planning of work activity from an educational view (courses)** , understood as a combination of skills with value and significance in the job, with a substratum of socially recognised professional proficiency and an effective reference in the dynamics of the everyday meeting between labour supply and demand:

INEM considers that this singling out of the occupation as a standard unit for occupational certification and training is not at all incompatible with the acknowledged need to use qualifications common to the two vocational training sub-systems, because the respective plans must be coherent and interchangeable.

([10]) Educational criteria of assessment/evaluation that the person can perform the activity associated with the vocational standard at an acceptable level in the job.

Having established the occupation as a combination of professional skills, these skills should be understood as the ability to apply knowledge, skills and attitudes to the performance of the occupation in question, including the ability to respond to unexpected problems, autonomy, flexibility, collaboration with the professional environment and labour organisation.

The second aim is achieved through the educational treatment of the professional skills that make up an occupation, as a pattern that should ideally have all the skills present in the reality of the productive world.

Thus, the Professional Certificate includes training content that is understood to be the minimum at national level to acquire the skills inherent to an occupation, without detriment to their possible complementation depending on regional socio-economic circumstances.

As for the third aim, concerning the maintenance of a uniform level of certified professional proficiency, the key factors are considered to be evaluation of the occupational vocational training received, as the most widespread means of testing professional skill, and regulation of the examination that gives access to the certificate fundamentally from work experience.

Thus, we can conclude that educational standards are defined according to skill units that consist, on the one hand, of regulated vocational training qualifications (MEC) and, on the other, Professional Certificates of occupational vocational training (INEM). Although they are not classified by levels, a certain subjective, and not regulated, relationship can be established between the two.

With regard to the control, maintenance and updating of vocational standards, each area has its own mechanisms of control and maintenance.

In the education system, these functions are performed by the General Council for Vocational Training (CGFP) which was established in accordance with Royal Decree 1684, of 7th November 1997, regulating the working of the CGFP, as

"a tripartite consultative body involving management and union organisations and public administration organisations and, furthermore, as an advisory body to the government in matters of vocational training"

The main powers of the CGFP are:

to evaluate and control the implementation of the National Programme and propose its updating when necessary, without detriment to the autonomous regions' powers in this area.

to report on the planned syllabuses and qualifications corresponding to the various vocational training degrees and specialities, and the Professional Certificates in matters of occupational vocational training and, where appropriate, their academic or professional homologation with the corresponding levels of regulated vocational training, without detriment to the powers of the State Schools Council in these matters.

Question 3

About the definition of the classification system:

What is described in the classification system by definition and by components?

What elements are included in the system?

What is the number of levels which are used?

What is the definition of the levels used (i.e. the level descriptors)?

What are the criteria for the allocation of standards to levels?

In the education system, according to the MEC, two levels of qualification are defined in vocational training. These two levels are based on the **nature of the work** and of the **skills required** to carry out the activity.

The essential and distinguishing features of each level and the criteria that define one level of qualification or another are listed in the table below.

Descriptors	Nature and context of the Work				
	Work processes and procedures	Information and inputs	Nature and types of decisions	Scope of relations	Type of organisational relations
Intermediate (Level 2)	Formalised Technical variables	Defined and pre-existing Indicative and binding Technique: Part specifications, instruction manuals, Codes	Alternatives limited to certain resources, tools and rates	Individual and possibly group Internal	They require task control
Advanced (Level 3)	Non-formalised Technical/ scientific and organisational variables	Totally or partly undefined Technical/organisational/economic: general plans, process manuals. Need to process information	They affect procedures, resources and technical efficiency	Group regulated reciprocally Unit External	They require supervision of aims

Descriptors	Skills, Knowledge, Experience			
	Creativity and Innovation	Interpretation	Initiative and decision-making	Training and Experience
Inter-mediate (Level 2)	Improve processes and procedures Find connections between existing concepts	Understand the process and detect abnormal behaviour in a certain range of values Assess ambiguous messages Evaluate the relative importance of several factors of the process	Operate under limited autonomy and in accordance with established procedures Evaluate suitably and rapidly the contingencies of the process between various alternatives given	Compulsory Secondary Education level Technical/practical experience Significant abilities and skills
Advanced (Level 3)	Create or define processes and procedures Find connections between existing or new concepts and combine them to produce new results	Understand the process and evaluate the consequences of non-codified abnormal behaviour Discern messages or limited or contradictory information	Operate with full autonomy within the assigned responsibility Evaluate the most suitable and fastest processes and decide on new alternative.	Baccalaureate level Technical/scientific grounding Experience solving technical problems

Source: Ministry of Education and Science; Madrid

According to the MEC, in the White paper on the Reform of the Education System:

"Professional modules ([11]) are organised horizontally in two levels of qualification: level 2 and level 3. This organisation is based on the structure of the training levels drawn up by the Commission of the European Community, and is characterised by the following features:

- *The qualification provided by Professional Modules 2 must enable the people that complete the learning to acquire the knowledge and skills inherent to a worker skilled in a certain occupation with extensive basic training, communication skills and an aptitude for exchanging information flows and teamwork.*

- *The level-2 modules must provide a complete and specific qualification for the practice of a profession with the ability to use that profession's tools and techniques. This practice generally implies execution, although it could be autonomous within the limit of the techniques inherent to it, and usually incorporates the use of procedures established in the technical-information manuals for the process.*

- *The qualification provided by Professional Modules 3 must enable people that complete its studies to acquire the knowledge and skills inherent to intermediate technicians with multi-purpose training and a general and co-ordinated view of the mechanical, electrical, administrative, technical/healthcare, etc. system in which they operate, assessing the function and purpose of the different elements that make it up.*

- *The level-3 modules must provide a complete qualification for the exercise of co-ordination and/or programming responsibilities. They provide skills that make it possible to understand the economic and organisational aspects of the work and generally mean that those who gain access to these modules already have a technological and scientific grounding that makes it possible to acquire this level of professional skill" ([12])*

Various points are worth mentioning about the professional levels in the education system.

Firstly, the title ***"This organisation is based on the structure of the training levels drawn up by the Commission of the European Community"*** makes it very clear that a new professional classification system has not been created; rather, the definitions included in the European Commission's structure of training levels has been used.

([11]) Training associated with the achievement of levels of qualification mentioned above.

([12]) MEC. White Paper on the Reform of the Education System; Madrid 1989.

The elements that make up each of the professional modules are:

- Name of the module
- Level of qualification and certificate to which it leads (level of qualification)
- Description of the professional field for which it qualifies
- Entry requisites, whether educational- or work experience-related, accredited by the corresponding test (not yet regulated)
- Minimum number of theoretical and practical hours corresponding to the subjects that make up the module
- Essential contents of these subjects.

Following the education system, INEM describes the elements of its Professional Certificates according to:

- a) the **professional profile** of the occupation, expressing the professional skills required, split into skill units with value and significance for certain jobs within the occupation. Such skill units will reflect professional achievements and their implementation criteria.
- b) the **theoretical-practical content** of the training to acquire the knowledge, skills and attitudes linked to the professional skill characteristic of each Professional Certificate.
- c) the **training itinerary** organised sequentially by professional modules that respond to training content associated with a skill unit.
- d) the **total duration** of the training itinerary and of each of the modules that make it up, expressed in hours.

Question 4

About the scope and binding:

- Does your country have a national classification system or a number of regional classification systems or even branch specific systems?

- If your country has specific regional or branch systems, where do they differ from each other?

- What is the status of the system (mandatory or not?)

In the education system, both classifications are nation-wide, although each autonomous region with powers in educational matters can legislate for some of the training contents that make up the qualifications, and decide where the training corresponding to one vocational standard or another is given, in order to adapt them fully to their particular circumstances.

In the case of regulated vocational training qualifications, the role of the autonomous regions, or regional government, responsible for education, is that of deciding when and where to implement the training programmes, and they can also define 35 to 45 % of the curriculum previously defined by the MEC.

The General Council for Vocational Training has the power to define new vocational standards and to assign to the MEC the classification of these standards in level-2 and/or 3 training programmes.

The MEC also makes the decision on a sectoral level, because it is the actual MEC, advised by the General Council for Vocational Training, and based on the Catalogue of Vocational Training Qualifications, who ultimately decides on the National Syllabus, promoting certain training programmes over others, depending on the corporate system existing in the zone/region where they are implemented.

Local governments and management and union organisations may make suggestions and/or proposals to the MEC about the supply of training programmes, but it is the MEC that makes the final decision.

Each autonomous region responsible for education has its own Vocational Training Council, which, in conjunction with the General Council for Vocational Training, reviews, maintains and updates the supply of this system's qualifications.

Question 5

What are the official aims and function(s) of Classification System(s) as well as the actual aims and function(s) or aims/functions to be obtained in the near future?

The aims of the second National Vocational Training Programme, concerning the creation of a classification system that unifies the two (education and labour) systems, are to:

- Develop integration of vocational qualifications.
- Promote integration of the different ways of acquiring professional skills
- Integrate and regulate the VT supply

For its part, the main aim of the existing vocational training system is "*to design a vocational training that professionalises, is practical, and acts as a genuine link between the education system and the labour market. Or, in other words, to design vocational training that is not a parallel route to other forms of education, let alone a lower-level route. It may be no exaggeration to say that achieving this aim is the key to the reform of secondary education*" ([13])

ROYAL DECREE 375, of 5th March 1999, establishes the creation of the National Institute for Qualifications, a tool whose aim is to establish a national system of qualifications. Nevertheless, the creation "on paper" has not yet been put into practice, so it is hard to establish much more than that established by the regulation setting up the Institute National of Qualifications.

The regulation establishes:

1. The National Institute for Qualifications, **adjoined to the Ministry of Labour and Social Affairs and with functional dependence on the General Council for Vocational Training,** is established as a body to support the latter in the performance of the functions established in this provision.

2. The National Institute for Qualifications will act as a technical tool, with independent decision-making powers, to **support the General Council for Vocational Training in the achievement of the following aims:**

a) Observation of qualifications and their evolution.

b) Determination of qualifications.

c) Accreditation of qualifications.

([13]) MEC White Paper on the Reform of the Education System Madrid 1989.

d) Development of integration of vocational qualifications.

e) Supervision and evaluation of the National Vocational Training Programme.

Article 2. Functions.

1. In accordance with the provisions established in the 2nd National Vocational Training Programme approved by the government, and in the terms and with the scope established therein, the National Institute for Qualifications shall have the following functions:

a) to propose the setting-up and management of a national system of vocational qualifications.

b) to draw up criteria which will define the requirements and characteristics of vocational qualifications for incorporation in the national system of vocational qualifications.

c) to design a basic methodology to identify professional skills and to define the model which a vocational qualification must follow in order to be included in the national system of vocational qualifications.

d) to propose a system for the accreditation and recognition of vocational qualifications.

e) to establish the procedure which will enable the agencies or institutes of qualifications set up by the autonomous regions and the management and union representatives to share responsibility for the definition of the Catalogue of Vocational Qualifications and the updating of sectoral requests.

f) to establish criteria to regulate the basic methods that must be followed in the evaluation of skills and in the procedure for the responsible authorities to grant accreditations.

g) to propose procedures for the accreditation of professional skills in the national system of vocational qualifications and its updating.

2. Professional observatories. Within the structure of the National Institute for Qualifications, an observatory will be set up with a database, which will actively promote co-operation with any other existing sectoral and regional observatories, capable of achieving the following aims:

b) to provide information on the evolution of the demand and supply of professions, occupations and profiles on the labour market, also taking into account, inter alia, the professional classification systems resulting from collective bargaining.

Question 6

Which procedures for the development of standards were followed?

Which aspects of the procedure are regularised?

Which aspects are subject of decision making by the people involved?

Who have to be involved?

Who should take the initiative to update standards?

Do you use fixed and formal periods of validity of standards?

Give a description of formal procedures or the most common procedures step by step.

Which (standard) bodies are formally recognised for the purpose of developing and maintaining the standards?

The signing of the *Economic and Social Agreement* (AES, 1984) and the subsequent creation, in 1986, of the tripartite *General Council for Vocational Training* (CGFP) were the starting-point of the participation of management and union representatives in the regulation and management of the regulated and occupational vocational training systems.

In 1990, ***Provincial Vocational Training Committees*** were established, consisting of representatives from the government and management and union organisations, responsible for the planning and management of education policies in the territory managed directly by the Ministry of Education and Science. The autonomous regions with full powers in matters of education can develop measures of their own to establish the participation of the management and union representatives.

The LOGSE was the result of the active participation of the CGFP, stimulated by the urgent need to undertake an in-depth reform of regulated vocational training. This reform is an attempt to create an integrated system with the participation of management and union representatives. This means, on the one hand, establishing bonds between initial vocational training for young people and continuing training for workers and, on the other, the participation of both education centres and companies in the development of regulated vocational training.

In the field of regulated vocational training, the drawing-up of the *Catalogue of FPR Qualifications* is one of the major attempts made to date, both to update the syllabus and to streamline the training supply and try to relate it to the evolution of jobs and the qualification needs of the productive system.

Therefore, **education experts** (professors from the different branches of vocational training), **labour experts** (technicians and managers of companies, management and union organisations from every sector) have all been heavily involved in designing and drawing up each qualification with the **experts from the MEC.**

The syllabus of the Regulated Vocational Training has been updated based on sectoral studies conducted previously by INEM, and this has resulted in the Catalogue of Regulated Vocational Training Qualifications (CTP). These studies provide information on aspects such as business structure; the evolution of business activities and their effect on the make-up of occupations; vocational training needs and the content and occupational itineraries of the various sectors and subsectors of Spanish economic activity.

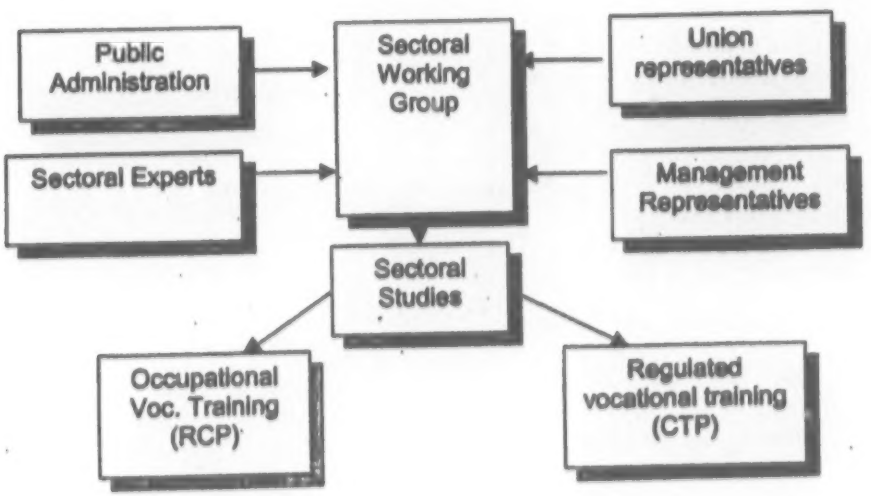

Figure: parties involved in producing sectoral studies

The procedure for drawing up the CTP has involved a broad and unprecedented process of study and analysis of the productive system along with the participation and advice of the actual management and union representatives, specialists from companies and technicians.

The methodology used to draw up professional qualifications is qualitative and based on the functional analysis of qualifications, based on the "professional families" of the sectoral studies conducted by INEM. The forecasts for the qualification of the professional families, training needs and the emergence of new occupations are medium-term. Producing the CTP has been an important advance in the analysis of qualifications in Spain. The forecasts for the evolution of qualifications, professional environments and the job contents are currently a significant reference source.

The CTP consists of the professional profiles of 24 professional families (2 yet to be developed): administration and management, agriculture and agri-food industries, handicrafts, graphic design, business and marketing, construction and public works, electricity and electronics, catering and tourism, chemicals, extractive and metallurgical industries, information, sound and vision, wood and furniture, mechanics and metal constructions, mechanics, automotion and equipment, vehicle maintenance, production maintenance and services, fishing and fish farming, health care, personal services, socio-cultural services, textiles, clothes and leather, glass, ceramics and building materials.

We can distinguish between two major phases, carried out mainly by the Vocational Training Committee:

1. Study and characterisation of the economic, technological/organisational, occupational and training aspects of productive sectors. These studies include the sectoral study conducted by the Spanish Office of Employment in collaboration with the Ministry of Education and Culture. Similarly, it is worth stressing the use of documentation about the prospects and evolution of professional activities and qualifications, or qualifications of other European countries, in these fields.

2. Based on the conclusions of the sectoral study, a "functional analysis" of the production processes was carried out by a work group consisting of technological experts from the sector and education experts, whose methodology was directed by people from the Renovation Project. Experts from other governmental bodies responsible for the sector's professional or labour regulations also collaborated. Thanks to the analysis conducted, by understanding the logic of the production processes, it has been possible to identify the functions that people must perform to achieve productive organisations' aims and aims. These functions are formulated as skill titles and are grouped together accordingly, to constitute the professional profiles of the qualifications.

3. In the third phase, taking the professional profile of the different qualifications as a reference, the basic knowledge, abilities, skills and attitudes necessary to obtain the professional skill defined by the profile have been identified and this "construct" has been expressed with the corresponding terminal skills and evaluation criteria. Similarly, the content has been determined of each training programme that enables pupils to obtain the aforementioned skills.

4. In the fourth phase, the qualifications and certificates have been compared, with the participation of management, union and professional organisations and other government bodies.

In the area of occupational training, since the creation of the National Vocational Training and Insertion Plan (1985) in the framework of the AES, the intervention of the CGFP to arrange and supervise the plan has been ensured.

In 1994, the Ministry of Labour started drawing up the *Compendium of Professional Certificates*. This device, launched by INEM, attempts to reorganise and update the occupational

training supply, in order to make the system simpler and more efficient, and to define new contents of qualifications linked to specific occupations. Thus, it is based on a new aspect of occupation, studying it from the point of view of "professional skill": not focusing only on technical knowledge, but on everything that surrounds the occupation and affects its development and performance. Consequently, each occupation gives rise to an "Occupational Model", which covers all the activities, skills and characteristics that define it. The different occupations that make up each "professional family" will be structured into training itineraries, which will update the occupation vocational training courses, which, when passed, will lead to the award of a Professional Certificate or Occupational Credit, issued by the collaborating centres.

The procedure followed by INEM has been to analyse and determine all the occupational profiles, defining their training syllabuses one by one. The methodology used is an adaptation of the functional analysis of profiles carried out by the MEC. For the phase of structuring training itineraries and preparing the evaluation tests leading to certification, the reference point is the Catalogue of Occupational Courses, which covers the existing supply.

In summary, the process is as follows:

1. Determination of the structure of the sector's jobs (occupational profiles), based on the processing and revision of the documentary sources, including Sectoral Studies.

2. Analysis of the tasks of each occupation, to deduce the professional proficiency elements of the profile. The functional analysis is not based strictly on skills, but on a hybrid with the descriptive analysis of tasks. As a result, the occupational profile files are designed.

3. Educational treatment of each profile, designing the syllabus of each occupational course. Each profile corresponds to an occupational course, planning a supply of specific courses.

This process has undergone changes insofar as it has incorporated an evaluation system to be applied to the issue of each certificate.

Each professional family has forecasts in terms of the evolution of:

- Professional structure
- Qualification contents of each profile analysed
- .New specific training needs
- Development of the occupational training curriculum required for each profile.

The process has been developed in 22 sectors: administration and management, agriculture and agri-food industries, handicrafts, graphic design, business and marketing, construction and public works, electricity and electronics, catering and tourism, chemicals, extractive and metallurgical industries, information, sound and vision, wood and furniture, mechanics and

metal constructions, mechanics, automotion and equipment, vehicle maintenance, production maintenance and services, fishing and fish farming, health care, personal services, socio-cultural services, textiles, clothes and leather, glass, ceramics and building materials

The autonomous regions with a more consolidated Occupation Vocational Training policy include Catalonia, Madrid and the Basque Country. Each of them has its own model, with marked differences in terms of organisational principles and planning tools and tools to adapt the supply to the demand's needs.

Formalised review periods have been established for the classification systems. These periods have been set at 5 years. Rarely, the actual Supreme Council for Vocational Training, at the request of one of its members, could also decide to review, update or modify the professional profiles mentioned above.

Question 7

Describe the procedures for the validation and implementation of standards.

- Does your country have different procedures for the adaptation of standards and the implementation of new standards into the classification system?

- Give a description of the procedure(s) step by step

In the education system, the procedure for the validation and implementation of educational standards has been made clear above, in the definition of the functions of the General Council for Vocational Training (Question 2), the procedure for drawing up the Catalogue of Regulated Vocational Training Qualifications and the Compendium of Professional Certificates (Question 6).

Question 8

In which way are standards maintained?

Who is primarily responsible?

What is the period of reviewing the standards (maximum or minimum)?

In the education system, the standards are the responsibility of the General Council for Vocational Training, review deadlines and periods are not regulated.

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Question 9

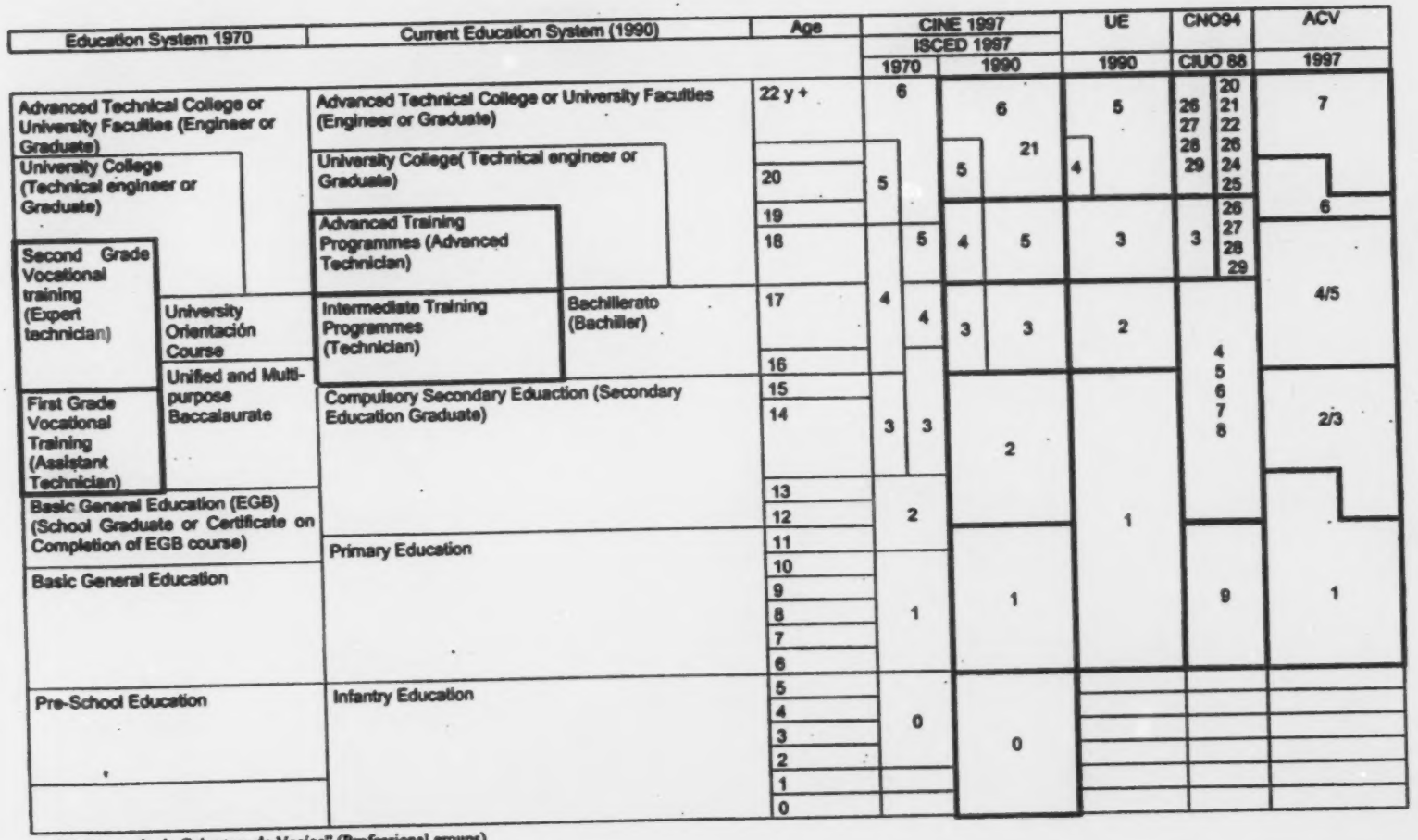
Describe the similarities and differences between the system(s) used in your country with the European 5-level Structure

- Which number of levels?

- Which definition of levels?

- The criteria for allocation

Some of these questions have been answered in previous questions (see Question 3), where the levels and criteria for allocation were defined. Nevertheless, the best way to make a comparison between the education and labour standards and the European 5-level Structure is the table below, where, according to the definitions, we can see how the different levels are allocated compared with each other.



ACV: "Acuerdo de Cobertura de Vacíos" (Profesional groups)
ES: Education system, Own source

According to the European Union, there are five levels of qualification:

Level 1:

Access is via compulsory education and vocational training. It must allow for the implementation of relatively simple work and can be acquired quickly.

Level 2:

Access via compulsory education and vocational training. It corresponds to a complete qualification.

Level 3:

Access via compulsory education and/or vocational training and school-based technical training or other secondary education. It involves technical work and/or programming and co-ordination responsibilities.

Level 4:

Access via secondary education (general or professional) and post-secondary theoretical education. It allows students to assume responsibilities for conception and/or leadership and/or management.

Level 5:

Access via secondary (general or professional) education and complete advanced training and involves mastering the professions' scientific foundations.

As can be seen in the comparison between the two education systems, the old system (of 1970) and the current system (of 1990), there is a mismatch between the professional qualifications. Thus, in the old system, accepting the current divisions of levels established by the European Union, vocational qualifications would correspond, considered at present, to levels 1 and 2, whereas these qualifications currently correspond to levels 2 and 3.

Question 10

What is the way(s) the European 5-level Structure is (still) used in your country in addition to your 'National' system(s) for classification?

In the education system, with the Reform of the Education System, and the reform of Vocational Training, professional profiles were constructed according to two factors: their suitability for the productive system and their comparability with the European Union's levels 2 and 3.

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16. Case studies

Question 11

Give the description of the procedure for the development of standards as recently executed in two sectors (health care and the construction industry):

- People involved (national or regional bodies, position, background, part in the process, responsibility).

- Procedures step by step

- Time span

- Which aids and appliances, resources and instruments were used

Question 12

Describe the procedure(s) for the validation of standards in these two sectors

Question 13

Describe the assessment of the procedures by people directly involved

- workability of the steps and criteria for classification

- compromises negotiated

- opinion of the quality of the results

- bottlenecks and other problems resulting from implementation

We shall discuss the three questions together for each sector: construction and health care.

In terms of educational standards, question 11 (Description of the procedure for the development of standards as recently executed in two sectors), question 12 (Description of the procedures for validation of the standards) and question 13 (Description of the assessment of the procedures by people directly involved) were answered by the above comments on nation-wide standards, because, as was mentioned, the educational standards (regulated and occupational vocational training) are regulated nation-wide with the participation of one of the autonomous regions, but governed by a comparable structure throughout the country.

Give your personal (expert) opinion about:

Question 15

Positive and negative aspects of the classification system in your country

- procedures and classification criteria included

Question 16

The potentials of the classification system to be used for accreditation of prior learning

- What should be changed to enhance these potentials?

In Spain there is currently no genuine integrated and, at the same time, diversified strategy on qualification needs, vocational training supply and labour mobility, both because of the economy's needs and workers' own demands (or rights).

Spain has no Classification of Occupations adapted to the occupational reality and comparable at international and Community level, and the methodology is still very poor. In many areas, *occupation and qualification, or qualification and training, are still confused. Only very recently has a comprehensive and systematic strategy for the recognition and classification of qualifications been adopted, which is now being developed.*

A view of qualification as occupational proficiency has been consolidated, and of training as job training geared towards this proficiency

What is the situation in our country regarding the identification and transparency of vocational qualifications?

Unlike other countries, in Spain there has not been enough concern about achieving the aim of designing and renewing qualifications, adapting the VT and employment policy and disseminating them through a powerful information and vocational guidance system

Save the odd exception, Spanish management organisations have not demanded or made for themselves a serious attempt to discover these optimum qualifications.

In Spain, companies have been conditioned for many years by occupation and qualification classifications that do not respond to their needs. However, they have not generally recommended an alternative negotiated sectorally with the unions, to overcome the old "labour categories", most of which are ambiguous and dysfunctional.

The need remains for recognition of the most important (and ideal) qualifications, *to be*

shared by broad groups of companies. Production units need a structured labour market, where they can find easily, economically and quickly the qualifications they need. Furthermore, this market is necessary so that those offering work can organise their vocational training and specialisation. It is also necessary to organise training efficiently and in a way that encourages young people with prospects of professional proficiency.

It is necessary to identify the fundamental structure of qualifications by enhancing the sectoral negotiation of these qualifications, i.e. with the participation of management and union representatives and the technical support of labour and education authorities. Names must be mad clear, in the form of a classification, and their semantic content must be expressed. This calls for a process of classification that must include the occupational correlation of the qualification at sectoral level and the components of this training. This classification process must include an attempt to optimise production through its application at microeconomic or company level.

One of the keys to sustainable economic growth - the competitiveness of companies and the continuous adaptation of workers to economic, technological and organisational changes - is the structure of *vocational qualifications.* This competitive advantage can be expressed as follows:

- *The* training *system must have a good cost/profit ratio, achieve the qualifications needed by the productive system,* or those required to respond to new potentials or demands of our sectors in an open economy.

- It must enable *companies to incorporate these qualifications easily* into their productive needs: not only through a broad public information and vocational guidance system, but through recognition (sectorally negotiated or agreed) of these qualifications with a properly paid professional career.

- *A professional rating must be established.* The aim is to *make the structure of qualifications effective through a good professional rating. The professional rating in itself would consist of identifying the fact that those subject to it have a certain vocational qualification and, where appropriate, hierarchy and/or the ability to perform certain tasks, and this would call for certain prior learning.*

One of the constant demands that have been made in the area of vocational qualifications has been for the creation of a tool to guarantee the continuous study of the evolution and consolidation of a National System of Vocational Qualifications that links the Catalogue of Professional Qualifications of the MEC to the Compendium of Professional Certificates of the Ministry of Labour and Social Security.

The main and fundamental aim of this National System of Vocational Qualifications would be to study, from a practical viewpoint, the structure of qualifications in Spain. Furthermore, work would be carried out to classify occupations and qualifications, introducing criteria for optimising the existing supply. To achieve this, regular consultations and debates should be

held with the intervention of management and union representatives in order to keep the different research and studies on qualifications in Spain alive and updated.

In keeping with the above, we cannot highlight positive and negative aspects of the classification system because, as has already been illustrated, it does not exist, but is currently being created, and, for the time being, no criteria have yet been defined to suggest how this classification system will be arranged, or which aspects will be taken into account.

The above discussion has included comments regarding the positive and negative aspects of the two systems for classifying standards: those of the education system and the labour market. We shall not reproduce them here, but we shall mention the most problematic aspects involved in the distinction between systems for classifying standards, made by the education system and the labour market.

Based on the application of the content of the new education system, subjects have become noticeably better-adapted to the professional profile and reality of work in companies. But despite this adaptation of contents to the professional profile, the labour market's capacity to receive better-educated young people does not seem to be improving, either quantitatively or qualitatively ([14]).

In the absence of a stable regulation between training and employment, market forces determine how positions are allocated on the labour market. Companies use academic qualifications as a selection criterion, not for what they may mean in terms of qualification or professional skills, but as an indicator of possible aptitudes, which they undertake to adjust and adapt to different jobs.

Therefore the qualifications awarded by the education system do not constitute specific professional qualifications or identities recognised as such on the market, but rather a filter mechanism to select people, with the consequent individual and collective costs. In most cases, the position people hold on the labour market is below the level to which they should be entitled by virtue of to the qualification obtained.

As Prieto and Homs point out, it seems clear that "*in the Spanish context, one of the main reasons why good initial vocational training has not been developed, which is appealing for broad sectors of young people, is precisely the predominance of in-house markets in our labour market*" ([15]).

Let us not forget that the name of "in-house" markets correspond to the fact that recognition

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([14]) DE P[illegible]O, Antonio: La nueva formación profesional: Dificultades de una construcción. REIS 77-78; Madrid 1997.

([15]) PRIET, C. and HOMS, O. " *Formation, emploi et compétitivité en Espagne*". Sociologie du Travail 4: 557-575.

of the qualification depends on each company's decisions ([16]), their particular labour organisation and their specific way of using their human resources. Each company defines qualification on its own terms and is free to recognise, or not, the training workers have acquired, whether in the education system or in other companies. In the case of young people, there is not usually any direct access to skilled positions, at the time of recruitment, but only after a reasonable long period of time in the company.

On the labour market, there is a large variety of classifications of vocational standards, in keeping with the large variety of collective bargaining (at national, regional, sectoral, and company level, etc.). Furthermore, although a framework for negotiation exists (the "*Acuerdo de Cobertura de Vacíos*"), it is not prescriptive, so each collective agreement reflects its own interpretation of the professional classification system. There are professional classification systems that date from 1970 and are still undergoing being discussed and adapted. Others, however, use the professional group concept to organise their professional classification, defining groups based on the qualifications awarded by the education system, but without taking into account the fact that the education system has changed and that these changes lead to serious mismatches in the group system.

In conclusion, we can say that the absence of an official system for the regulation and certification of vocational standards suitable for both the education system and the labour market has serious drawbacks. The National System of Qualifications (SNC), through the National Institute for Qualifications, should regulate this relationship, to enable the construction of a national classification system of compatible vocational standards between both areas: the education system and the labour market.

The National System of Qualifications, included in the 2nd Vocational Training Programme, must enable managers and workers to classify those who offer and seek certain jobs. The aforementioned National System of Qualifications must take into account the evolution of the national system of regulated, vocational and continuing vocational training, and transfers of powers to the autonomous regions.

Drawing up the actual system involves elements of labour organisation (in-house), qualification procedures (which affect each individual) and working conditions (negotiating parties) that need to take into account the protagonists (management and union organisations), preferably of each sectoral area.

The use of qualifications (standards) forms part of a company's labour organisation. Classifying these qualifications involves factors of power, structuring in a hierarchy and working conditions (flexibility, versatility, etc.) that must be rethought and validated by negotiators.

Once the Sectoral Classification or System of Qualifications has been drawn up, it will be

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([16]) Company is taken to be a synonym of sector or another group subject to collective bargaining.

possible to organise the necessary training systems, adapting training to each sector (professional itinerary) and to each worker (training itinerary).

As a result, we shall achieve a system of information, acquisition and recognition of the new professional skills, which is of use to the company and of interest to the worker (skills which are perfectly co-ordinate in efficient and transparent labour markets).

Appendix 1: Professional families that make up the Catalogue of Regulated Vocational Training Qualifications

Professional families	Qualifications	
	Level 2	Level 3
1. Agricultural activities		
2. Physical and sporting activities		
3. Shipping/fishing activities		
4. Administration		
5. Graphic design		
6. Handicrafts (not available)		
7. Business and marketing		
8. Communication, sound and vision		
9. Building and civil works	1. Building finishes 2. Operation and maintenance of building machinery 3. Concrete constructions 4. Brickwork constructions	**5. Development and application of building projects** **6. Development of town-planning projects and surveys** **7. Site implementation and plans**
10. Electricity and electronics		
11. Mechanical manufacturing		
12. Catering and tourism		
13. Public Relations		
14. Food industries		
15. IT		
16. Wood and furniture		
17. Self-propelled vehicle maintenance		
18. Production maintenance and services		
19. Other professions (not available)		
20. Chemicals		
21. Health care	1. Auxiliary nursing 2. Pharmacy	**3. Pathological anatomy and cytology** **4. Dietetics** **5. healthcare documentation** **6. Oral hygiene** **7. Diagnostic imaging** **8. Clinical diagnosis laboratory** **9. Orthoprosthetics** **10. Dental prostheses** **11. Radiotherapy** **12. Environmental health**
22. Socio-cultural and community services		
23. Textiles, clothes and leather		
24. Glass and ceramics		

There follows a description of the standards associated with a training programmes that, once passed, accredit the level-2 vocational qualification, in the case of the intermediate programmes, and level 3, in the case of the advanced programmes, in both the construction industry and healthcare sector.

Professional family: construction

Level 2

Building finishes

Professional profile

General skill

Organise and perform jobs involving continuous-coating constructions, in plates and/or sheets, and assembly and installation of prefabricated panels in established safety and quality conditions, and have and check the site's safety measures.

Skill units:

Organise building-finish jobs.

Apply conglomerate continuous coatings.

Pave and cut.

Apply sheet coatings.

Apply paints and varnishes.

Assemble and install prefabricated panels.

Check the safety measures established in the plan.

Administer, manage and market a small company or workshop.

Operation and maintenance of building machinery

Professional profile

General skill

Organise and perform jobs involving demolition, moving earth, drilling, laying pavement and shifting loads in established safety and quality conditions, assuming responsibility for the top-level maintenance of equipment, and have and check the site's safety measures.

Skill units:

Organise jobs performed with heavy building machinery.

Operate and maintain excavating and demolition machinery.

Operate and maintain spreading and earth and pavement compacting machinery.

Operate and maintain drilling and boring machinery.

Operate and maintain load-lifting and shifting machinery and girder-dropping equipment.

Check the safety measures established in the plan.

Administer, manage and market a small company or workshop.

Concrete constructions

Professional profile

General skill

Organise and perform jobs involving forming, shoring, bracing, reinforcing, install concrete and pressure-free linear pipes, in established safety and quality conditions, and have and check the site's safety measures.

Skill units:

Organise concrete-construction jobs.

Form, shore and brace.

Produce and install reinforcements.

Install concrete.

Build structural elements with prefabricated.

Install pressure-free linear pipes.

Check the safety measures established in the plan.

Administer, manage and market a small company or workshop.

Brickwork constructions

Professional profile

General skill

Organise and perform jobs involving brickwork constructions, roofs, coverings, waterproofing, conglomerate continuous coatings, and construction of pressure-free linear pipes, in established safety and quality conditions, and have and check the site's safety measures.

Skill units:

Organise brickwork construction jobs.

Build factory enclosures and partitions.

Build and waterproof roofs.

Apply conglomerate continuous coatings.

Install pressure-free linear pipes.

Check the safety measures established in the plan.

Administer, manage and market a small company or workshop.

Level 3

Development and application of building projects

Professional profile

General skill

Intervene in building and civil-engineering projects, executing or co-ordinating their implementation, and as an execution assistant, supervising planning.

In any event, this technician will act under the general supervision of architects, engineers or graduates and/or technical, non-technical or qualified architects.

Skill units:

Develop projects and supervise the execution of plans.

Plot plans of building projects.

Measure and value unit quantities.

Supervise the site planning.

Administer, manage and market a small company or workshop.

Development of town-planning projects and surveys

Professional profile

General skill

Intervene in surveys and layouts of constructions and land, assisting their execution, and intervene in road-infrastructure and land-planning projects, drawing up plans of surveys, services, supplies and of land-planning plans, collecting information and providing on their level solutions to plotting and sizing problems.
In any event, this technician will act under the general supervision of architects, engineers or graduates and/or technical, non-technical or qualified architects.

Skill units:

Participate in field and office work.

Develop infrastructure projects.

Participate in planning jobs.

Participate in site layouts.

Administer, manage and market a small company or workshop.

Site implementation and plans

Professional profile

General skill

Intervene in the implementation of civil and building works, organising the work site layouts, supervising the planning, implementing layouts and checking the application of the safety plan.

In any event, this technician will act under the general supervision of architects, engineers or graduates and/or technical, non-technical or qualified architects.

Skill units:

Participate in site layouts.

Organise, supervise and control work site layouts.

Apply the on-site safety plan.

Administer, manage and market a small company or workshop.

Professional family: health care

The professional skills of healthcare qualifications refer to the function of organising the unit/office/service, the necessary functions to render the service (planning everyday work, taking samples, preparing and distributing samples), adequately executing technical protocols in required safety and quality conditions and evaluation and quality control of the service offered or rendered to patients/customers.

Healthcare professional qualifications as a whole are intended to cover the training needs corresponding to vocational qualification levels of both the public and private healthcare sectors, in the following professional areas: primary and community care; specialist care, public health, general or central services; and healthcare products.

The vocational qualifications identified and expressed in the profiles of the qualifications respond to the qualification needs in the technical work segment of the following technological processes: primary care, emergency, support units, outpatients departments, hospitals, special units, healthcare codification, clinical laboratories, pathological anatomy, cytology, medical image, radiotherapy, dietetics, pharmacy, orthotic, prosthetic and orthoprosthetic products, general technical assistance and the environment.

Level 2

Auxiliary nursing

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: provide auxiliary care for patients/customers and act on the healthcare conditions of their environment: as a member of a nursing team in the specialist care and primary care healthcare centres; accountable to the qualified nurse; or, where appropriate, as a member of a healthcare team in health care derived from the practice of the profession, under the corresponding supervision

Skill units:

Prepare the materials and process the information of the department/unit, in their areas of responsibility.

Apply auxiliary nursing care to the patient/customer.

Look after the healthcare conditions of the patient's environment and the healthcare material/instruments used in the different departments/units/services.

Collaborate on the rendering of mental care to the patient/customer, applying, on their level, techniques of psychological support and healthcare education.

Perform instrumentation tasks in oral healthcare teams.

Pharmacy

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: dispense, sell and distribute pharmacy and parapharmacy products, collecting payment, controlling cash and carrying out the administrative processing of deferred payments, organising the acquisition, reception, storage and replacement of products and materials issued in pharmacy and parapharmacy establishments, and performing elementary physical-chemical operations, under the corresponding supervision.

Skill units:

Process and control products, invoicing and information in pharmacy establishments.

Dispense medicine and parapharmacy products, inform customers about their use, determine simple anatomic-physiological parameters and encourage healthy habits in customers.

Prepare medicinal, dietetic and cosmetic preparations, under established protocols and the doctor's supervision.

Perform elementary and standardised clinical analyses, under the doctor's supervision.

Pathological anatomy and cytology

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: perform, on their level, autopsies, process biopsies and perform the cytological analysis of clinical samples, interpreting and validating the technical results, to use them as support for clinical or medical-legal diagnosis, organising and programming, on their level, the work, complying with service-quality and resource-optimisation criteria, under the corresponding supervision.

Skill units:

Organise and manage, on their level, the work area assigned to the unit/office.

Perform clinical or medical/legal autopsies under the doctor's supervision.

Process clinical samples from autopsies, surgery and biopsies, leaving them ready for analysis by the pathologist.

Select and give approximate diagnoses of cytologies, under the doctor's supervision.

Keep a macroscopic, microscopic and ultramicroscopic photographic record of samples and preparations.

Level 3

Dietetics

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: prepare diets adapted to individuals and/or groups and control the quality of people's nutrition, analysing their eating behaviour and nutritional needs; programme and apply educational activities to improve the public's eating habits, under the corresponding supervision.

Skill units:

Organise and manage, on their level, the work area assigned to the unit/office.

Prepare and monitor diets adapted to individuals and groups, according to their nutritional needs.

Prepare and monitor diets adapted to patients and groups, according to their specific pathology.

Control and monitor the qualitative composition of food to determine its hygienic/dietetic quality.

Monitor the conservation, manipulation and transformation of food for human consumption.

Promote public and community health through nutritional education, activities to promote and educate about health.

Healthcare documentation

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: define and organise procedures for processing information and clinical documentation, codifying them and guaranteeing compliance with the regulations of the health authority and with international classification and codification systems, under the corresponding supervision.

Skill units:

Organise/manage the archives of documentation and clinical histories.

Define and/or evaluate procedures for processing information and clinical documentation.

Identify, remove and codify clinical and non-clinical data of healthcare documentation.

Validate and use the data of the Minimum Basic Database (C.M.B.D.) using statistical, epidemiological and quality-control tools.

Oral hygiene

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: promote public and community health, programming and developing preventative and care activities, as a member of a oral healthcare team, executing these activities by examining, detecting and recording people's state of oral health/disease and organising and programming,

on their level, the work, under quality, safety and resource-optimisation criteria, under the corresponding supervision.

Skill units:

Organise and manage, on their level, the work area assigned to the unit/office.

Examine, detect and record people's state of oral health/disease, under the doctor's supervision.

Prevent people's oral diseases through direct intervention, according to established safety and quality regulations.

Evaluate public and community health, through oral health, via epidemiological surveillance activities.

Promote public and community health through oral health, through activities to promote and educate about health.

Diagnostic imaging

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: obtain morphological and functional recording charts of the human body for diagnostic purposes, preparing, handling and controlling the equipment, interpreting and validating the technical results in quality and environmental safety conditions, under the corresponding supervision.

Skill units:

Organise and manage, on their level, the work area assigned to the unit/office.

Obtain recording charts of the human body, using x-ray equipment.

Obtain recording charts of the human body, using magnetic-resonance and CAT computerised-image processing equipment.

Obtain recording charts of the human body, using radioisotopic techniques using nuclear-medicine equipment

Apply and check radioprotection measures in units for medical/diagnostic application of ionising radiations, under the doctor's supervision.

Clinical diagnosis laboratory

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: perform analytical studies of human biological samples, interpreting and assessing the technical results, so that they can be used to support clinical diagnosis and/or geared towards research, acting under quality, safety and environmental regulations, organising and administering the areas assigned to the corresponding clinical diagnosis laboratory, under the corresponding supervision.

Skill units:

Organise and manage, on their level, the work area assigned to the unit/office.

Collect, register, classify and distribute human biological samples.

Conduct clinical biochemical studies, processing and analysing human biological samples.

Conduct microbiological studies, processing and analysing samples of human origin.

Perform haematological and genetic studies, processing and analysing human bone marrow and blood samples, and obtain haemoderivatives.

Orthoprosthetics

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: define orthoses, prostheses and orthoprostheses and technical assistance, organise, programme and supervise manufacture and customisation, complying with, or guaranteeing compliance with, the specifications established by regulations and the corresponding prescription.

Skill units:

Administer and manage an orthoprosthetic workshop/laboratory.

Define orthoses, prostheses, orthoprostheses or technical assistance, adapted to the prescription and anatomic/functional characteristics of the customer.

Organise, programme and supervise the manufacture of orthoses, prostheses, orthoprostheses and technical assistance.

Prepare customised orthoses, prostheses, orthoprostheses and technical assistance.

Adapt orthoses, prostheses, orthoprostheses and/or technical assistance and check them regularly.

Dental prostheses

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: design, manufacture and repair dentofacial prostheses and orthoses adapted to the patient/customer based on the doctor's prescriptions, complying with quality, safety and hygiene regulations and meeting the established deadline.

Skill units:

Administer and manage a dental prosthesis laboratory.

Define the product, organise, programme and control the manufacture of dentofacial orthoses and prostheses.

Manufacture, modify and repair removable resin dentofacial prostheses and orthoses.

Manufacture, modify and repair removable metal dentofacial prostheses.

Manufacture, modify and repair fixed dentofacial prostheses.

Manufacture, modify and repair orthodontic apparatus and components of wire and metal-strip dental prostheses.

Manufacture, modify and repair precision and implant-supported mixed surgical dentofacial prostheses

Radiotherapy

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: apply radiotherapy treatments, in accordance with medical prescription, preparing patients for testing, complying with the dosage and radioprotection regulations, and the regulations of their unit's specific radioactive facility, organising and programming the work under criteria for service quality and optimising available resources and administering and managing the technical/healthcare information of the service/unit, under the corresponding supervision.

Skill units:

Organise and manage, on their level, the work area assigned to the unit/office.

Receive patients and give them technical care during their stay in the radiotherapy-simulation unit.

Apply teletherapy treatments: cobalt-therapy, particle accelerators and low- and medium-energy x-rays, under the doctor's supervision.

Environmental health

Professional profile

General skill

The general vocational qualification requirements of the productive system for this technician are to: perform the necessary inspection operations to identify, control, monitor, evaluate and, where appropriate, correct the environmental health risk factors, developing programmes to educate about and promote public health in interaction with the environment, under the corresponding supervision.

Skill units:

Organise and manage the environmental health unit.

Identify, control and monitor public-health risks associated with the use of water.

Identify, control and monitor public-health risks associated with air and different energy sources.

Identify, control and monitor public-health risks associated with chemical products and vectors of interest in public health.

Identify, control and monitor public-health risks associated with the management of solid waste.

Identify, control and monitor public-health risks associated with food contamination.

Promote public health through environmental education activities.

Appendix 2: Professional families that make up the Compendium of Professional Proficiency Certificates of Occupational Vocational Training

Professional families Qualifications

Professional families	Qualifications
1. Administration and offices	
2. Agriculture	
3. Handicrafts	
4. Automotion	
5. Business	
6. Construction and public works	Bricklayer, stonemason, shutterer, plasterer, excavator operator
7. Education and research	
8. Graphic design	
9. Textile, leather and leather goods industries	
10. Equipment manufacturing industry	
11. Electromagnetics	
12. Food industries	
13. Wood and cork industries	
14. Heavy industry and metal constructions	
15. Chemical industries	
16. Information and artistic productions	
17. Maintenance and repair	
18. Mining and first transformations	
19. Assembly and installation	
20. Energy and water production, transformation and distribution	
21. Insurance and finance	
22. Community and personal services	
23. Company Services	
24. Textiles, leather and leather goods	
25. Transport and communications	
26. Tourism and catering	

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Professional family: construction

Details of the occupation:

Name: bricklayer.

Professional family: construction and public works.

Professional profile of the occupation:

a) General skill:

Organise and perform bricklaying jobs such as facework, ceramic roofs and mortar and paste coatings, following the guidelines established in the technical documentation and complying with the current regulations in matters of prevention of industrial accidents, safety and health.

b) Skill units:

Lay out and build simple foundations and horizontal drainage systems.

Build facework with bricks, stones and blocks of cement.

Build ceramic roofs and cover them with tiles.

Apply continuous coatings with mortars and pastes.

Details of the occupation:

Name: stonemason.

Professional family: construction and public works.

Professional profile of the occupation:

a) General skill:

Design or collaborate on the design of stones, moulds and templates; carve, fit, clean and repair stones and ashlar constructions, observing current regulations in matters of risk prevention and health in the workplace.

b) Skill units:

Carve ashlar stones with smooth and straight faces.

Carve ashlar stones with smooth, curved and moulded faces.

Set ashlar stones and paving slabs.

Repoint, clean and repair ashlar constructions.

Details of the occupation:

Name: shutterer.

Professional family: construction and public works.

Professional profile of the occupation:

a) General skill:

Form (on-site or in a workshop) wood, metal or of any other material, mould pieces of concrete, and organise and prepare the work site layout and material and human resources, recover moulds and materials used, through stripping and maintenance, observing conditions of safety in the workplace.

b) Skill units:

Organise and prepare the work site layout and equipment, tools and materials.

Assemble and disassemble forms for pieces of concrete.

Assemble and slide sliding forms for large concrete elements.

Details of the occupation:

Name: plasterer.

Professional family: construction and public works.

Professional profile of the occupation:

a) General skill:

Design and perform jobs inherent to preparing models and moulds, and reproduce and fit plaster elements, guaranteeing the product and observing the regulations in matters of safety and hygiene in the workplace.

b) Skill units:

Design and produce plaster models.

Prepare moulds.

Cast plaster pieces.

Fit and hone plaster elements.

Details of the occupation

Name: excavating machinery operator.

Professional family: construction and public works.

Professional profile of the occupation

a) General skill:

Perform tasks involved in using loading and excavating machinery with front, rear and bivalve-scoop equipment, and tune and maintain it.

b) Skill units:

Work soil with excavating machinery.

Tune and maintain excavating machinery.

Appendix 3: System of Vocational Qualifications of the Basque Institute for Qualifications

Basque Institute for Qualifications and Vocational Training

System of Vocational Qualifications (CAPV)

Basque vocational training plan

The Basque Vocational Training Plan is a draft regulation for all vocational training action in the scope of the autonomous region of the Basque Country, which is a key part of the policy designed to gear training towards employment for the sake of competitiveness.

The Basque Vocational Training Plan is supported by three of the regional government's ministries: "Education, Universities and Research", "Justice, Economy, Labour and Social Security" and "Industry, Agriculture and Fisheries". It was also approved by the representatives of education centres and management and union representatives.

The series of measures, actions and programmes that make up this Plan must be conceived as tools that enable optimal training and, very importantly, employment strategies.

The three ministries that make up the Basque Vocational Training Plan will create the following 3 new bodies:

- Observatory for Vocational Qualifications (Justice, Economy, Labour and Social Security)

- Basque Institute for Qualifications and Vocational Training (Education, Universities and Research)

- Agency for Evaluation and Quality (Industry, Agriculture and Fisheries)

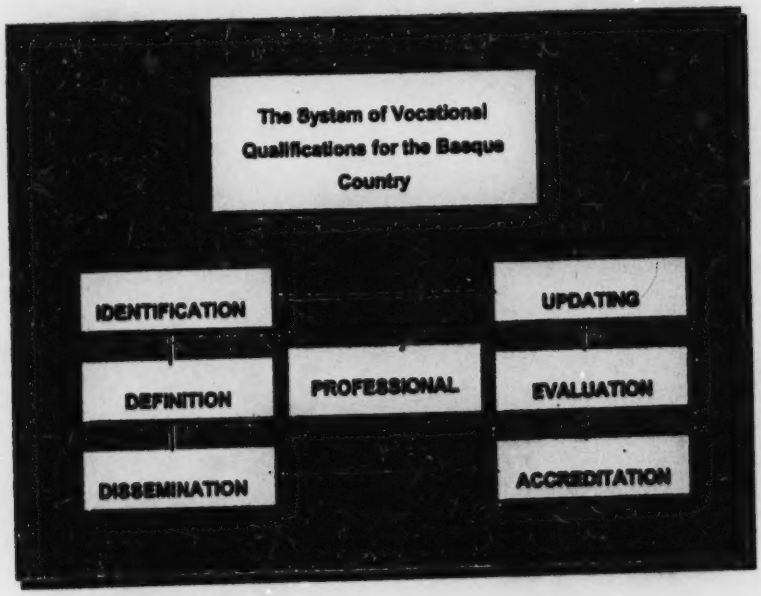
One of the mandates derived from the Basque Vocational Training Plan is the creation of a System of Vocational Qualifications for the Basque Country.

The system of vocational qualifications for the Basque country

The basic function of the future system is to identify and define the actual vocational qualifications and, thus, set up of an official structure to present and regulate them. Other complementary functions associated with this include the dissemination, revision, and updating of vocational qualifications.

The definition of a catalogue of vocational training modules associated with the system, and the setting-up of a system for the evaluation and accreditation of vocational qualifications were also considered of key importance.

Furthermore, the system of vocational qualifications is considered to be a basic tool for establishing strategies and policies to improve training and employment in the autonomous region.



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The aims expected to be achieved by setting up the system are:

- to give an efficient response to the needs proposed by the various sectors that make up the autonomous region's productive structure, establishing a clear link between the requirements generated by the development and promotion of productive processes and the professional skill of the workforce necessary to deal with them.

- to provide people with greater motivation to accredit and advance (extend) their vocational qualification, providing different ways to achieve it.

In this respect, it will be essential to establish a quality system that integrates the various existing sub-systems of vocational training (regulated, vocational and continuing, etc.), and a procedure to capitalise on the skills established in a vocational qualification, regardless of the sub-system or itinerary used to achieve it.

- to improve labour-market transparency, geared towards professional itineraries consistent with the productive reality and enabling well-founded regulation of the professional activities that require them.

- to offer references for the various representatives and bodies to optimise training plans

- to be a basic tool to provide strategies and plans for training and employment.

The jobs in the system of vocational qualifications are geared towards achieving two basic goals:

- Compendium of Vocational Qualifications, with a structure to arrange and present them. Associated with this, a catalogue of training modules.

- System for the recognition and accreditation of skills (of vocational qualifications) that guarantees its prestige, validity, reliability and accreditation opportunities in the Basque Country and the rest of Spain, laying the foundations for future European equivalences.

Compendium of vocational qualifications

Basically, the tasks to be performed are:

- Identification and definition of vocational qualifications

- Creation of an official structure for their co-ordination and presentation

- Definition of an official catalogue of training modules.

Vocational qualifications

A Vocational Qualification of the Basque Country will be the official skill specification that will accredit for its holders, throughout the autonomous region of the Basque Country, and

where appropriate, throughout Spain, professional skill in an occupation or occupational field and, on certain occasions, skill to perform a regulated professional activity.

Professional skill

We take "professional skill" to mean a combination of abilities, skills and professional knowledge, necessary to perform certain activities (professional achievements) at the required level for productive organisations and bodies to achieve their aims in terms of competitiveness, quality and efficiency.

Achieving the professional skill contained in any qualification, i.e. achieving a vocational qualification, will mean having the skills, abilities, skills and professional knowledge necessary "to perform" some specified professional activities at "required levels".

It is very important to stress that the level of the abilities, skills and professional knowledge must be adequate to be applied to various contexts and to respond to a broad range of situations of variable and fast-developing production.

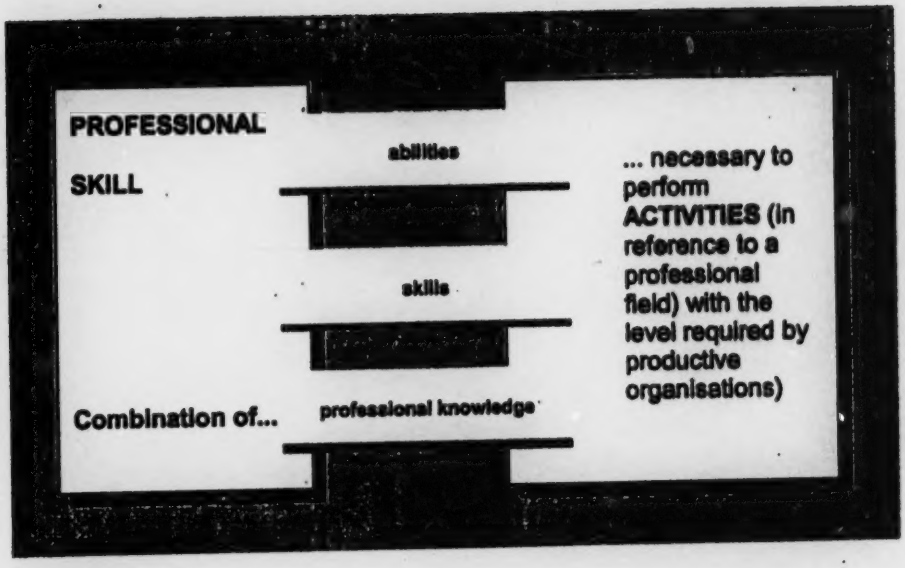
Professional skill is demonstrated through professional achievements ([17]), which, are subsequently grouped together in skill units ([18]), and skill areas are also identified.

These skill areas are a series of skills and basic and/or transversal technical/professional knowledge necessary to obtain the professional achievements grouped in the skill units that make up each vocational qualification

In short, the professional skill that acts as a reference for a vocational qualification consists of a series of skill units and areas that group together skills and basic and/or transversal knowledge that facilitate the performance of the skills in various contexts and situations.

([17]) Professional achievement is a term used to indicate competence. They express the achievements or results of the professional activity, which are considered satisfactory in the various functions and working situations of an occupation or regulated professional activity. Specifically, they indicate what an individual should be able to perform in an occupation or occupational field.

([18]) A skill unit is a series of professional achievements, which is of value and significance in the job. Along with the skill areas, they are accreditable units and references for establishing training.



Occupation

This term is particularly important in the demarcation of professional skills and, in short, in the definition of vocational qualifications.

It is the reference used to define the activities (professional achievements) for which one will have professional skill will be the occupation ([19]) and, where appropriate, a regulated professional activity.

The occupation, as a reference, will go beyond a list of tasks or activities to be performed, associated with a specific job or a certain working role. The occupation must be obtained in accordance with certain characteristics and as a result of an analysis of the functions and productive processes performed by the various management organisations.

([19]) It must be borne in mind that the term "occupation" adopted by the Basque Vocational Training Plan, as a reference to establish the professional skills on which the vocational qualifications that make up the "System" must be based, differs from the traditional, static acceptance of "occupation".

At present, the occupation must be conceived as something more than competence in a working role or situation and must transcend the simple ability to perform a series of tasks in a certain organisation. Thus, the occupation is determined by an "occupational field" and covers a series of functions, specifying the results that must be achieved to perform them competently in various situations and contexts.

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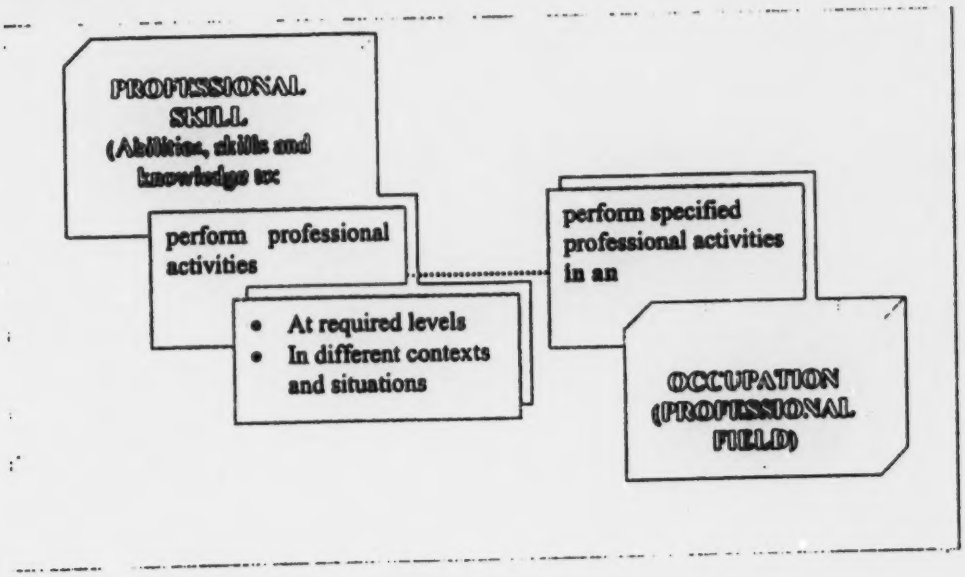
Therefore, the occupation is designated as an occupational field. Both terms must have the same standing.



At any rate, it must involve a combination of professional achievements of different natures (manual skills, cognitive abilities, etc.) grouped in skill units, with value and significance "for" and "in" the job (insertion and/or promotion), with a substratum of acceptable professional proficiency for management and union representatives.

Furthermore, they may become an effective reference in the dynamics of the everyday meeting between labour supply and demand.

With the interpretation of these concepts, the necessary tasks to obtain vocational qualifications are to:

- Analyse productive sectors with a specific methodology (functional analysis);

- Identify and define professional achievements with their necessary achievement criteria;

- Group them together in skill units, identifying the possible skill area or, in other words, transversal and/or basic skills and knowledge;

- Identify occupations or occupational fields with their corresponding skill units and areas;

- Define possible vocational qualifications as a basic hypothesis and in accordance with the initial directives;

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- Submit the results obtained for consideration by a team of experts in the Basque Region's professional fields

- Final external verification of the results achieved with bodies and organisations

- Send it for approval by the Basque Council for Vocational Training and, subsequently, by the Basque Government.

For phases 1, 2 and 3, the basic job sources were the professional profiles established for the Catalogue of Professional Qualifications (CTP) and, to a lesser extent, the references of the Compendium of Professional Proficiency Certificates (RCP).

Structure of the Basque country's compendium of vocational qualifications

Once the series of Vocational Qualifications (i.e. the compendium) has been achieved, they must be arranged for their presentation in a structure. This structure must meet, inter alia, the following requisites:

- Arrange vocational qualifications so that they encourage people to further their qualification, considering all the ways in which people can increase their competence in their work.

- Arrange them horizontally in "skill areas" ([20]), designed to show the affinity between vocational qualifications in order to facilitate professional mobility,

- Arrange them hierarchically in five levels of qualification corresponding to the levels of professional achievements required by production, regardless of the fact that the five levels of qualification will not be required in all skill areas.

- Cover all the most significant occupations and activities of the Basque economy.

- Provide a basis for relevant comparisons with vocational qualifications in other European Union member states.

The structure defined in this way must be of use in vocational guidance procedures, establishing training itineraries, job hunting and professional development, being used by people, public or private guidance services and companies' human resources departments.

([20]) The skill area is based on the affinity of skills required in the job, also derived from the logic of belonging to a professional medium (affinity of techniques and knowledge) and to a sector of productive activity (organisational and functional affinity)

Structure of the Basque Country's vocational qualifications

Level	VOCATIONAL QUALIFICATIONS						
5							
4							
3							
2							
1							
	Elec. Sys.	Equip-ment	Service	Elec. Man.	Foun-ding	Met. Con.	Etc.
	Electricity and Electronics			Mechanical manufacturing			Etc.
	SKILL AREAS						

Structure of the Basque Country's vocational qualifications

Catalogue of training modules

Once the compendium of vocational qualifications has been established, an associated catalogue of training modules must be defined.

The three main tasks to be performed are:

- To define, for each skill area (professional family), the training modules associated with the system of qualifications

- Institutional training actions (Education and Labour), a series of modules that they include and basic regulations to which they are subject

- Methods and procedures for teaching modules and achieving academic/professional targets.

System for the recognition and accreditation of vocational qualifications

The system for the recognition and accreditation of qualifications is extremely important, to give them prestige and ensure the Basque Vocational Training Plan is successful.

Three major tasks must be performed:

- For each vocational qualification, a document must be drawn up, which establishes the official prescription of the evidence of competence that is considered the minimum necessary to give someone a vocational qualification.

It makes clear what must be evaluated at the required level, and the sources and types of evidence of competence that are considered critical.

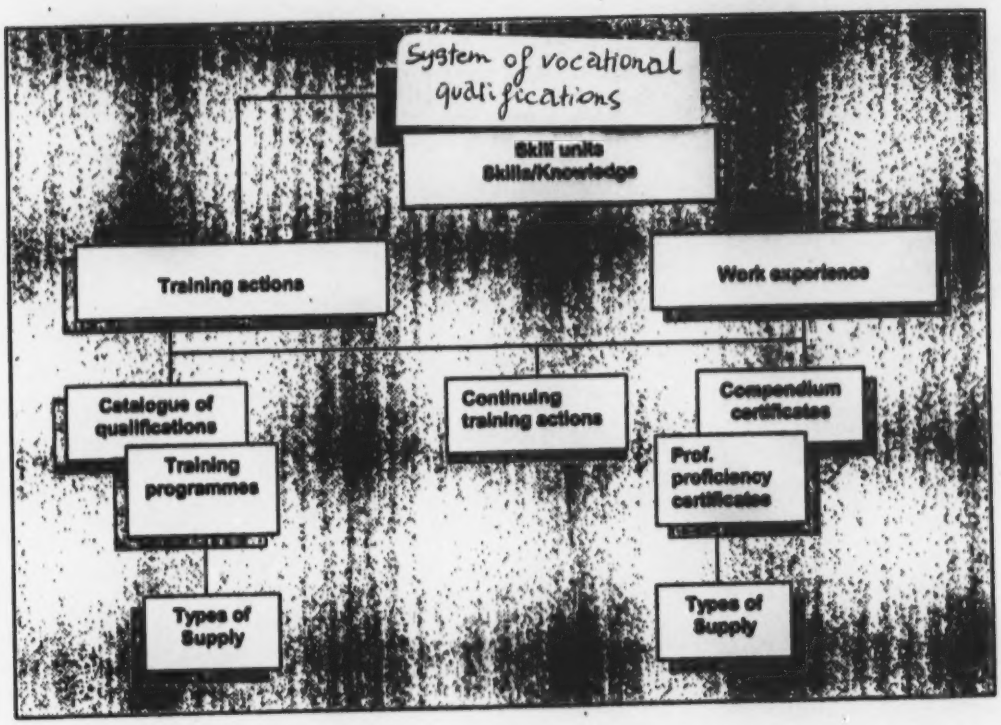
Each skill unit that makes up the vocational qualification will have an official prescription for the evidence of competence. Similarly, the section of "Transversal and/or basic skills and knowledge for the vocational qualification" must also have this prescription.

- Approve the bodies and staff authorised to evaluate and certify professional skills.

To register professional skills certified for an individual, the government will draw up a future "Index of Vocational Qualifications".

- Define an index of skills, or a similar document, to register skills achieved.

Different ways to achieve vocational qualifications



Different ways to achieve vocational qualifications

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Requisites and structure of vocational qualifications

Vocational Qualifications must meet the following requisites and respond to the needs of:

a) The production of the various sectors of economic activity. Therefore, the elements of skill at the level of implementation and adequate proficiency to guarantee the achievement of the business targets of the various productive sectors must be specified.

b) Professional insertion/promotion, i.e. respond to people's needs to meet the requirements of the labour market and deal with the rapid development of occupations. Therefore, they must specify an occupational skill and, therefore, the holder of this skill must accredit:

- a skill applicable to various contexts

- and skills to respond to a broad range of situations of variable and fast- developing production.

c) In short, the skill established and specified in a vocational qualification must be of value and significance 'for' and 'in' the job, for both those doing the hiring and for people getting hired.

Vocational qualifications must allow for the recognition and accreditation of people's professional skills, regardless of the different ways in which they are acquired, and it should be possible to obtain them as a result of learning, training or work experience.

Vocational qualifications must be issued on passing the evaluation process, which ensures that the skills that are accredited are of an adequate level to be performed in working situations. Obtaining evidence of competence in the workplace must be considered a fundamental source of a vocational qualification.

Vocational qualifications must be accessible for everyone indiscriminately, providing they can demonstrate the corresponding skill specifications.

Vocational qualifications will consist of two official documents:

Skill specification, which will basically include the elements of skill necessary to perform an occupation or regulated professional activity:

- **General skills**

- List of skill units, skills and basic and/or transversal knowledge

    - Skill units: UC1, UC2, etc.

    - Skills and transversal and/or basic knowledge: Areas: 1,2, etc.

    - Development of skill units

- Skill unit 1

- Professional achievements and criteria

- Occupational field specifications

- Skills and knowledge

- Situation in the productive sector and skill area

Evaluation specification, which will include the necessary elements and Procedures to observe and measure the achievement of competence and, in short, the achievement of part or all of a vocational qualification.

- Skill unit evaluation specification

    - Skill units 1

    - Evaluation specifications

    - Evaluation situations

    - Groupings

    - Sources of evidence and evaluation criteria

- Occupational field specifications

- Evaluation specifications for areas, skills and transversal and/or basic knowledge

- Skills and knowledge: 1

- Prescriptions and guidelines for the evaluation process

Bibliography

Del Rey Guanter, Salvador: *La negociación colectiva tras la reforma laboral de 1994. Perspectivas a la luz de los acuerdos colectivos de 1997.* Estudios 62. Consejo Económico y Social; Madrid 1998.

Acuerdo sobre Cobertura de Vacios. Resolution of 13th May 1997.

MEC. *White Paper on the Reform of the Education System;* Madrid 1989.

De Pablo, Antonio: *La nueva formación profesional: Dificultades de una construcción.* REIS 77-78; Madrid 1997; p.156.

Moreno Piñero, Fernando and Parra Abad, Eloy: *Clasificación profesional y Movilidad.* Revista de Economía y Sociología 21-22; Madrid 1993.

Prieto, C. and hHoms, O.: "*Formation, emploi et compétitivité en Espagne* ". Sociologie du Travail 4: 557-575.

Manzanares, José: "*El conocimiento de las cualificaciones en España y su optimización* ". Revista de Economía y Sociología 21-22; Madrid 1993.

INEM: "*Plan de actuación para la actualización de la formación profesional. Estudios sectoriales de necesidades de formación* "; Madrid.

Manzanares, José: "*Cualificación, formación y clasificación profesional. Notas para un debate*". Herramientas 53; Madrid 1999.

III. France

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Introduction

The way the questions are addressed in the common frame for comparative studies pose a problem when concerning the French situation. The combination of the terms *classification* and *standards* and their apparent interchangeability is not as clearly relevant as expressed. Both issues need to be dealt with separately. For this reason, this report is not only divided into three parts as suggested by the common frame: the description of the present overall national situation, the case studies and the experts' opinion. It also separates in two the description of the national situation, dealing first with the *standards* and then with the *classifications*. When it comes to the case studies, they only concern the development of the *standards* in the chosen area.

1. The national context

1.1 Vocational standards

When speaking about France, one needs to start stating that the reference in terms of standards in vocational training lies with the diplomas of the ministry of education.

1.1.1 The definition of standards (Question 2)

What is regarded as a standard, expressed in a possible format?

In France, the term "standard" is not used in the field of vocational training. The term closest to it is "frame of reference" ("*référentiel*"), developed at the beginning of the 1980s in the Ministry of Education. The use of the term has spread throughout most organisations setting up specific training curricula outside this ministry, in particular curricula for adults organised by the Ministry of Labour and those set-up in various industries. While there are several bodies developing various frames of reference, most of them position themselves in relation to those of the ministry of education. One can therefore say that they constitute the frame of reference and that they influence the format of the other frames.

What are the elements of standards?

When viewed in greater detail, the development process for occupational standards as applied to Ministry of Education diplomas distinguishes three forms of frames of reference (référentiels):

- An occupational activity frame of reference, a document that describes an individuals

activities in an occupational context in terms of goals, conditions and production methods;

- A **certification** frame of reference for the occupational field, which is a regulatory document describing the skills to be attained in that field. The document applies to skill assessment aspects just as the occupational activity frame of reference applies to working situations. A diploma is awarded to attest to these skills; the certification frame of reference specifies the conditions and assessment indicators for the skills. It should be noted that only the occupational field is considered since the field of general knowledge is subject to another principle of definition and validation;
- **The examination regulations** which prescribe modes for validating skills.

The occupational activity frame of reference (*référentiel d'activités professionnelles*) is composed of four headings:

- The name of the diploma.
- The field of activity, which includes:
  - a definition summarising activities and including information about what the diploma holder does, the type of working situation in which that individual is found and the end purposes of his work;
  - a description of the occupational context which concretely situates these job activities in firms and sectors;
  - the boundaries and relative importance of these activities. The boundaries indicate the operational functions in firms in which the diploma holder works and the main tasks performed by that individual and his autonomy. The relative importance of these activities is judged according to the most relevant criteria of the field in question.
- The description of the activities, which distinguishes:
  - functions, meaning sets of activities in the firm orientated towards the same goal (human resources function, finance function, maintenance function). A function has a collective character and directs an individuals activity;
  - the tasks which describe an element of an activity for an expected service, using resources available to the person and according to the requirements placed on her.
- The environment for performing these activities, which includes three series of indicators:
  - means and resources;
  - expected results;
  - autonomy and responsibility.

The certification frame of reference (*référentiel de certification*) in the occupational field describes the skills in three ways:

- Capabilities ("*capacités*") as a way to qualify general and transversal know-how (for example, analyse, prepare, communicate, implement).
- Know-how ("*le savoir faire*"), meaning here the information held by the individual and related to his actions in the surrounding technical and social environment. These know-how can be appreciated by an outside observer only when that person watches the actions themselves and their concrete manifestations (words, gestures, transformation of objects, etc.).
- Associated knowledge corresponding to the whole of the information held by the individual and relevant to the objects and the environment, the properties of these objects and the laws related to this environment.

Concretely, a certification frame of reference (*référentiel* de certification) in an occupational field includes five elements:

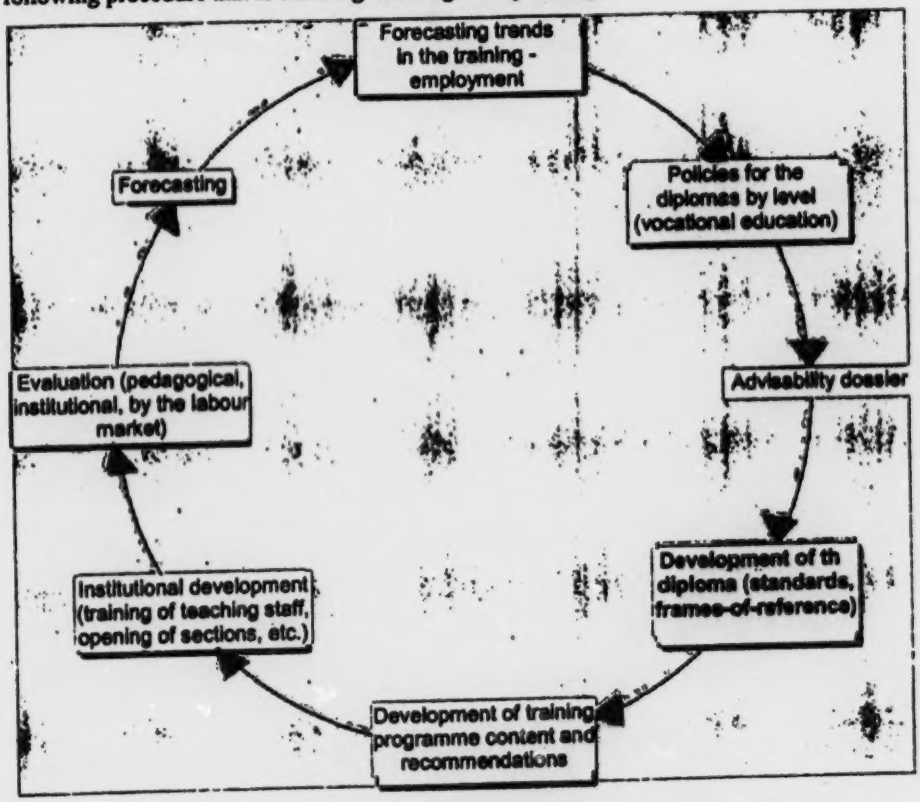
- a table that relates the occupational activity frame of reference and the certification frame of reference in the occupational field;
- a skills summary which is the counterpart to the definition of activities;
- a description of capabilities and know-how, which specifies what the trained person should be capable of, the conditions of implementation (the available resources and elements of the environment) and the evaluation criteria (the expected performance of the candidate);
- a table of relationships between the individual's know-how and associated knowledge;
- specifications of the associated knowledge, describing the ideas and concepts involved and the limits of the knowledge required for the examination.

The examination regulations (*règlements d'examen*) define:

- the nature of the tests;
- the form of the assessment (written, practical, oral, during training);
- the coefficient assigned to each test;
- the duration of each test.

Each test is modelled according to the skills that it assesses, the associated knowledge that it validates, the medium through which it is administered and the nature of the performances expected of the candidate.

The relevance of these frames of reference for the future is taken care of by the following procedure that is ensuring their regular up-dating :


Forecasting trends in the training - employment
Policies for the diplomas by level (vocational education)
Advisability dossier
Development of th diploma (standards, frames-of-reference)
Development of training programme content and recommendations
Institutional development (training of teaching staff, opening of sections, etc.)
Evaluation (pedagogical, institutional, by the labour market)
Forecasting

Steps in designing and implementing technical and vocational education

Which types of standards are used ? Are you using one or more standards?

There is only this one type of frame of reference in vocational training provided by the ministry of education

How to avoid bias?

The quality control of the frame of reference is done in the specific commissions set up in the ministry of education of which representatives of employers and trade unions in the specific industry are also members together with teachers and experts. These so-called Vocational Advisory Committees (CPC) ensure the quality of the occupational activity frames of references. Their list is as follows :

Mining and building materials industries.

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Metallurgy, machinery, electro-technical, and electronic industries.

Construction and Public Works.

Chemicals.

Food industries.

Textiles and related industries.

Clothing.

Wood and derivative products.

Transport and maintenance.

Audio-visual and communication techniques.

Applied arts.

Marketing techniques.

Administrative and management techniques.

Tourism, hotel and leisure activities industries.

Other activities of the service sector.

Personal body care.

Health care and social services.

The same form of consultation, run by the Ministry of Agriculture, exists in the agricultural field.

Biases in the use of the reference are fought against through a high standardisation of the evaluation process, i.e. the examination process. The national and regional Inspectorates play an important role in this context, as well as national centralised examination procedures.

1.1.2 Scope and binding character (Question 4)

The frames of references that underlie the construction of the national certification establish a specific hierarchy between national diplomas and build an architecture for the system (see point I - 2 below). Links between this architecture and classifications are loose (see further). Already for some years, some industries have started developing their own certificates that they use to certify their internal further training activities. One cannot say however that these new certificates (Certificates of Professional Qualifications - CQP) constitute a new classification. For some of them (very few) a request for equivalence with national diplomas has been introduced.

Generally, standards are applied throughout France, but some of them only pertain to one industry (the above CQP).

The procedure for constructing the three-step frames of reference *(la démarche par référentiels)* can be considered very binding within the training system. Awarding a diploma or a certification is tied to respecting the prescriptions defined by the certification frame of reference and the examination regulations. Both texts are legally binding. The occupational activity frame of reference is not a binding prescription as such. It is understood that its recommendations are implemented in both the certification frame of reference and the examination regulations related to it.

This procedure has been inherited from the French scholastic tradition, which was founded on what could be called egalitarian selection to the extent that everyone takes the same tests in a system that assigns those with the best test results to the most prestigious training programmes.

One might think that in emphasising final vocational goals in training programmes rather than their theoretical content, occupational standards try to combat this traditional model. The results are, however, very marginal.

On the other hand creating a new diploma or a new certification involves defining specific frames of reference. A movement has recently appeared to institute the use of an obligatory list of frames of reference (corresponding to a descriptive repertoire of existing jobs) by which all new training programmes should be positioned. Associating these frames of reference and jobs has been attempted along these lines. But the exercise has brought up problems of constructing correlation between occupational classification and training classification and between the homogeneity between detailed description of occupational activity and the content of training programmes.

As adult training has developed and life long training has been encouraged, there has been a movement to adapt examination regulations. It has consisted in dividing examinations into units, grouping them into autonomous tests - four for all diplomas - which can be taken over a period of several years. Along with the use of the accreditation-of-prior-experience procedure *(validation d'acquis professionnels)*, it is possible to be awarded a diploma by equivalence (meaning that the candidate does not take tests) for one or several units, but never for the entire credential.

Conversely, the binding character of occupational standards with respect to the labour system is much less explicit since the doctrine of employers is to evaluate the qualification and remuneration of individuals according to the work performed and not according to skills possessed. In this context the certification is taken into account only to the extent that collective bargaining agreements between labour and management so stipulate. Thus industry certification are necessarily positioned according to classifications in effect in the industry, while references to other certifications (for example diplomas awarded by the Ministry of Education) vary according to collective bargaining agreements. Nevertheless this situation does not prevent the existence of a tacit functioning model that tends to make diploma levels correspond to classification levels.

Finally, one can wonder to what extent new forms of work organisation and the changes in activity content will challenge the principle of remuneration founded on work actually performed. It could do so through bringing in a factor of remuneration founded on the capacity to respond to unplanned events, even if this capacity is not mobilised during the review period.

1.1.3 Procedures for the development of standards and Procedures for the validation and implementation of standards (Questions 6 and 7)

The following table gives indications on procedures, partners and sequences of development, validation and implementation of standards.

The stage-by stage process involved in the creation of a diploma

STAGES		PARTNERS	ROLES
I-ADVISABILITY DOSSIER	(1) Origin of request	Internal: Minister's office, Inspectorate, DLC External: Labour and management partners whether represented on CPCs or not	Formulation of request
	(2) Receipt of request	(Directorate of Upper/ Lower Secondary Schools, Directorate of Teaching and Diplomas. Secretariat of CPCs, DESCs	First consideration and opening of dossier
	(3) Preparation of "occupational advisability" dossier	Organisation making the request DESCO IGEN CEREQ	Preparation of the dossier (see Guide for preparing the occupational advisability dossier
	(4) Consideration of dossier	DESCO IGEN	Expert analysis of dossier Submission of project to CPC
	(5) Proposal Decision	Members of CPC The Minister, on a proposal from the Directorate of Higher and Lower Secondary Education	Decides on commencement of work

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STAGES		PARTNERS	ROLES
II - TECHNICAL AND LEGISLATIVE PREPARATION OF DIPLOMA	(6) Appointment of project leader and formation of working group	General Secretariat of CPCs The project leader may be: - a member of the inspectorate; - a teacher; - an "employer" or "employee" representative - a member of the DESCO	Proposes a competent person to take over dossier Organisation of the working group (stages 7 to 10)
	(7) Reference system for occupational activities	Person in charge of CPC Offices of DESCO or person in charge of CPC Working group including -representatives of job sector; - CEREQ; - Other experts	Ensure compliance with diploma policy and methodology and ensure co-ordination of meetings Ensure compliance with regulations Definition of functions and occupational tasks
	(8) Diploma reference system	Person in charge of CPC Working group (including Inspectorate and teachers)	Method, co-ordination regulations Definition of abilities and skills characteristic of diploma
III - DEFINITION OF TRAINING PROGRAMME CONTENTS AND RESOURCES	(9) Conditions of award of diploma	Person in charge of CPC DESCO Working group (including Inspectorate and teachers)	Preparation and implementation of general regulations Preparation of examination content and form

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STAGES		PARTNERS	ROLES
	(10) Opinion of CPC Decision	Project leader Members of CPC DESCO The Minister	Presentation of dossier Formulation of opinion Drafting of regulations Order creating the diploma
	(11) Training contents and Teaching recommendations	DESCO General Inspectorate Teachers associated with work	
	(12) Equipment guide	DESCO General Inspectorate Teachers associated with work	
IV - DEVELOPMENT OF TRAINING	(13) Teacher training contents (initial and contents)	DESCO General Inspectorate Teachers	
	(14) Teacher training	ENNA MAFPEN Universities	
	(15) Planning and opening of sections	Regional and local authority level Director of education	

STAGES		PARTNERS	ROLES
115 V - ASSESSMENT	(16) Pedagogical appraisal of contents	Inspectorate DPD and DESCO	
	(17) Follow-up of implementation of diplomas. Evaluation of creation of sections throughout the country. Evaluation by labour market	Local education authorities Regional observatories Research organisations DPD CEREQ Research organisations	

Abbreviations:

I.G.E.N. : General Inspectorate of Education

DESCO : Directorate of Education and Schools

1.1.4 Maintenance of standards (Question 8)

Who is primarily responsible?

Any member of the CPC (Vocational Advisory Commissions) can put a request for updating, reviewing or creating a new diploma. The instruction of the dossier follows then the regular procedure.

What is the period of reviewing the standards?

In general, every specific diploma is reviewed every five years.

There exists a national classification (a list) of training specialities (nomenclature de formation) as well as a national classification (a list) of occupations (nomenclature de professions -PCS). Both have statistical purposes but key players on the labour market and in the training field use them extensively. In PCS there is a qualitative element in that it also reflects the socio-category of the occupation, its position in the hierarchy of occupations.

1.2 A Diploma Classification System constructed with dual entry points

Describe in short the 'history' of the (National) Classification System(s) of vocational standards in operation in your country (Question 1)

The French education and training system is structured according to training programmes that lead to preparing general, technical or vocational education diplomas. The common characteristic shared by these diplomas is that they are all defined by the qualification ([21]) that they award and the specialisation field for which the accredited individual receives recognition. Some of these diplomas stand out by being fundamentally linked to the organisation dispensing the training. This is the case most of the time in higher education with engineering diplomas for instance which are school-specific or with university diplomas which are linked to the accrediting university. This explains why there are so many diplomas, several thousands in fact. This means that in order for them to be comprehensible to the society at large one must have a diploma classification system. Thus various training programme and diploma classification systems have been successively elaborated, with the

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([21]) The main diploma titles are: the "CAP" (certificate of vocational education), the "BEP" (vocational studies diploma), the "baccalaureat", the "BTS" (higher technical diploma), the "DUT" (university technology diploma), the engineering diploma, the "licence", the master's, the "DEA" (advanced studies diploma), the "DESS" (higher specialised studies) and the "doctorat".

currently prevailing system characterised, by its use of two classification criteria.

- The first criterion involves *a training level classification* that ranks every diploma **vertically** according to the degree of qualification required in the jobs to which these diplomas apply.
- The second criterion deals with a *training specialisation classification that* classifies diplomas **horizontally** according to the fields of application and/or know-how involved in the training.

The training level classification system was developed during the 1960s and officially promulgated exactly thirty years ago on 21st March, 1969. The training specialisation classification system now in force is much more recent and dates from 1994 when it was promulgated. Nevertheless these two systems share a common historical characteristic in that they both introduce the same universal approach in their principles for classifying training programmes. Their purpose, each in its field, is to replace all previous classification grids. In the description below, we have tried to look at specific questions of the grid that are common to both systems.

1.2.1 The 1969 training level classification system

Which interests were taken into account? (question 1)

The 1969 training level classification system was created in the 1960s as part of French economic planning studies and focused on prospective professional recruitment needs for different types of training at various levels (the 4th and 5th Plans covered 1962-1965 and 1966-1970 respectively. See Fourastié, 1963 and CGP, 1966). Three government bodies came together to take part in these studies to construct this classification system: the ministries of education, vocational training and economic planning. The classification system replaced an older system from the early 1950s and applied only to Ministry of Education diplomas.

What are the official aims and function(s) of Classification System(s)? (question 5)

Since the system was initially designed as an economic planning tool, it was used to classify the vocational workforce according to the type of studies pursued and the levels attained in order to help establish training policies for young people. Hence, the systems purpose was to express jobs in terms of diplomas by creating a correspondence between the degree of qualification associated with a given job and the required scholastic standards (diploma and duration of studies). In that fashion it could be claimed that the requirements of a job were satisfied (Affichard, 198). In a society such as France, translating jobs into diplomas was everything but a straightforward task. On the one hand, there was a group of jobs for which translation is easy, either because the standards of access to them were known or officially regulated as in the fields of medicine, engineering or the liberal professions, or because the jobs were at the bottom of the job hierarchy, in service employment for example. But only 30 % of the working population in the 1960s fell into this group. As for the others jobs, it was

much harder to find a correspondence and it became necessary to call upon experts who in turn relied on job analyses (Vimont and Dubrulle, 1966).

Nevertheless, this function as a tool for analysing prospective needs should not hide the fact that the State developed this system so as to have at its disposal a policy-shaping instrument. It was an indispensable tool for developing active educational policies directed at increasing and standardising vocational training in order to guide and promote French economic development.

The underlying idea was that this classification system should not remain confined inside government agencies and bodies but should be imposed upon labour and management so that when recruiting, both parties could easily identify an individuals qualifications.

From this angle, one goal of the system was to enable the State to underwrite guarantees for training programme titles, which carried less value than national diplomas. For that reason, adopting this classification system led to setting up a certification commission responsible for positioning all diplomas offered on the systems grid.

The definition of the classification system (question 3)

The six different levels of the training level classification system classify individuals both by jobs and diplomas, criteria from which a *normal* equivalence is established (Affichard, 1983).

The different levels are described below:

Levels I and II: personnel occupying positions usually requiring a level of training equal or superior to the "licence" or engineering schools.

Level III: personnel occupying positions usually requiring the higher technician diploma training level or a diploma from the IUTs ([22]) and end of the first cycle of higher education.

Level IV: personnel occupying supervisory staff positions or possessing a level of qualification equivalent to a technical or technician baccalaureate or technician diploma.

Level V: personnel occupying positions usually requiring a training level equivalent to the BEP and the CAP.

Level Va: personnel occupying positions requiring a short training of a year maximum, leading in particular to the *Certificat d'éducation professionnelle* (Certificate of vocational education) or any other certification of the same nature.

Level VI: personnel occupying positions requiring no training beyond the end of compulsory education.

([22]) Instituts Universitaires Technologiques (Higher Technological Institutes)

It should be noted that the classifying principle is not based on the internal operations of the education system but much more on the effect of the training programmes as to their capacity of enhancing social status (Affichard, 1983). From this view-point the classification system embraces a universalist principle since it is not attached to training programme conditions but to the objectives of the training programmes. This has the result that one can classify, with the help of a certification commission, all diplomas according to their respective objectives.

Hence, there was the determination to establish new social standards for evaluating educational investments. The success of this policy has been mixed and depends on which part of French society is considered:

- It has partially succeeded in penetrating the production system, and the standards in this classification system have been adopted in some collective bargaining agreements in some industries. But the standard is far from being generally widespread when such agreements are being negotiated between labour and management.
- It has taken much "better" within the educational system, given that it guided the educational reforms of the 1960s, which included the extension of compulsory education to the age of sixteen, the development of vocational lycées and schools and the appearance of new diplomas such as the *Brevets d'Études Professionnelles* (Vocational Studies Certificate)or the *Diplômes Universitaires Technologiques* (Technical University Diplomas). The policy thus had the effect that it became absolutely normal to rank diplomas independently of training programmes (general, technical or vocational).

1.2.2 The 1994 training specialisation classification system

Which interests were taken into account ?

The Training Specialisation Classification System (NSF – nomenclature des spécialités) set up in 1994 offers an important new feature in the field of classifying training programme content. As opposed to the preceding classification grids, fragmented and structured according to training programme levels and types, this classification system claims that its basic principle is to classify any training programme regardless of its level, preparation mode, field of application or social use. This principle of universality goes well beyond what was observed in the 1969 training level classification system since in this case all training programmes are actually being considered, including personal development programmes for private use as well as daily activity and leisure oriented programmes, in other words programmes without a vocational purpose.

This innovation is in line with policies to de-compartmentalise various components of the initial training system (general secondary education, vocational education, universities, business and engineering schools and others).

Historically, these various sub-systems have been accustomed to wide autonomy in their operations, autonomy rooted in the very history of the French educational system structuring process.

This autonomy has been favourable to developing practices and classification modes specifically adapted to the social field covered by the training programmes in these sub-systems.

The turning-point came at the end of the 1980s when education, particularly higher education, became a mass phenomenon and challenged this compartmentalisation, requiring the training system to be more comprehensible externally and internally. From this view-point, juxtaposing training programme specialisation classification systems which would be sub-system specific proved unsatisfactory: none of the existing classification systems were capable of positioning items originating from other sub-systems, given the absence of an initial common classification approach.

The definition of the classification system

For the authors of the training programme specialisation classification system, the idea of specialisation, like the idea of training programme level, *above all* acts as a social marker of the proficiency dispensed to individuals in relationship to the training curricula and fields of activity (professional or other) in which these qualifications are implemented (CNIS, 1994).

Hence it is designed so that different players can **pinpoint the social skills developed by the training programmes followed.** Consequently the training specialisation refers not only to cognitive content but also reflects the organisation of know-how, looking in which way it can be used socially.

From this point of view, a distinction along the lines of "knowledge, know-how and social skills" does not set up divisions in the training specialisation classification system because that distinction is not coherent with desired functions of organising and positioning knowledge through social skills. Neither is it the idea to bring into the classification system pedagogical structures or procedures. Although they underpin the offer of training programmes, whether they are public/private, academic/apprenticeships, initial/on-going etc., they do not have a defining function for the system in terms of training specialisations. The upshot is that in practical terms constructing a programme specialisation classification system should result from an empirical approach that favours the descriptive and operational nature of the components included. All training programmes should have their place, and different classification levels -fitting into each other- should be proposed.

Three major empirical categories of specialisations stood out in the eyes of those designing the classification system:

- **Core disciplines.** These are made up of the body of knowledge which served as the basis for the major divisions between disciplines in the school and university systems.

- **Technical and professional fields.** They are made up of the body of knowledge related both to the laws and internal properties of technical systems and activities, most often professional, which activate these systems. In operational terms, this empirical category is systematically divided into two sub-categories: technical-professional production fields and technical-professional service fields.
- **Personal development fields.** They group together the offer of training programmes involved with individual capacities and abilities - physical, mental or manual which can be applied to a variety of activity fields.

The specialisation classification system was developed around these major empirical categories. In it there are four classifying hierarchies: a level 4, a level 17, a level 100 and a level 700.

In the designers' assessment of the classification system, the central level is level 100 because it is the bridge to former classification systems, which still remain partially active through the organisation of some institutions such as the Vocational Advisory Commissions (CPC - *Commissions Professionnelles Consultatives*). At this level, some groups of specialisations have been established by references to a specific field (a discipline, a technical-vocational field or a personal development field). Others have been set up by references to several other groups at level 100 which belong to a same level 17 field. In comparison with its predecessors, this way of introducing groups of "pluritechnological" or "pluridisciplinary specialisations represents an innovation. Level 100 is reproduced in the appendix.

The classification headings at level 17 correspond to major fields of specialisation, themselves built up from more specific closely related fields and the most frequent associations in transversal training programmes. The table below shows details of the correspondences:

Level 4	Level 17
1 - Academic disciplines	10 - General training
	11 - Mathematics and sciences
	12 - Social sciences and law
	13 - Arts and letters
2 - Technical-professional production fields	20 - Multi-technical production specialisations
	21 - Agriculture, fishing, forestry and parks and gardens
	22 - Manufacturing
	23 - Civil engineering, construction and wood and wood derivatives
	24 - Flexible materials
	25 - Machinery, electricity, electronics
3 - Technical-professional service fields	30 - Multiple skill specialisations in services
	31 - Trade and management
	32 - Communication and information processing
	33 - Services to individuals
	34 - Services to groups
4 - Personal development fields	41 - Individual and social abilities
	42 - Leisure and daily activities

Level 700 is an innovation in the classification system, which enables distinctions to be made within every specialisation group. These distinctions may be made by defining more precisely the field of application when dealing with groups of core disciplines or by defining the function when dealing with technical-vocational specialisations. Possible application fields are set up under seven headings, and possible functions under nine headings. The table below shows the cross references between the headings.

Application field	Functions
A - not indicated or other	M - not indicated or other
B - Tools, work methods or models	N - Design
C - Scientific applications	P - Organisation, management
D - Applications to social sciences and law	R - Monitoring, prevention and maintenance
E - Arts and letters applications	S - Production
F - Technical and production applications	T - Performance of services
G - Service activity applications	U - Machine surveillance and operation
	V - Artistic production
	W - Marketing and sales

What are the official aims and function(s) of classification system(s)?

The idea of specialisation plays *above all* a role of social marker pinpointing of the proficiency dispensed to individuals in the relationship of training curricula and the fields of activity (professional or other) in which these qualifications are implemented (CNIS, 1994). Hence it is designed to enable various players to **locate the social skills developed by the training programmes taken**. Consequently, the training specialisation refers not only to content but it also reflects the organisation of knowledge for its later social use.

It is still too early to evaluate the impact of the training specialisation classification system with precision. The decree that officially brought it into existence requires the system to be used in all government bodies and agencies.

Nevertheless the substantial work involved in classifying all the existing training programmes hinders its systematic use in the education system. Furthermore, there is no way to evaluate the extent of the system's penetration outside the social field of training. In particular, how companies and industries will use this classification system remains an open question.

2. Links with the European five-level structure

Describe the similarities and differences between the system(s) used in your country with the European 5-level structure.

The enquiries we conducted for this study showed us that the five level system from 1985 had no practical relevance as such anymore. Its level-structure had therefore no relevance to our subject... To answer question 9 we therefore need to refer to the Eurostat ISCED levels. With this classification, the French level structure as described under point 1.2.1. does not cause major problems. Easily can one make cross-references from one to the other, both in terms of

number of levels (we group the French 5a and 6-levels under ISCED-level 0-1, for example) and in terms of definitions. Certainly, the understanding behind both classifications is different but there exist practical ways of coping that support the use of both of them. It is true that French people are not used to setting on equal footing vocational and general achievement at upper secondary school level. The first level diplomas of vocational education and training (CAP and BEP) require less training years to achieve than the Baccalaureate, that is the first diploma of general education. Therefore the French level structure sets the former lower than the latter. Because of trade-offs at European level, it has however been agreed that both kind of completion was to be allocated as ISCED level III.

What is the way(s) the European 5-level Structure is (still) used in your country in addition to your 'National' system(s) for classification?

For the purpose of this study we have contacted the employment services in charge of managing the Eures system. The replies we received from them have been that SEDOC never was really used by French services for placement purposes and that it is now totally obsolete and "in the cupboard". The Eures network makes use of a formalised data base of job offers that does not take account of training "levels". Two main elements are being used that may be seen in their combination, as equivalent to the idea of "levels" : ISCO and NACE. These two international classifications have more or less been put in equivalence with similar French ones. To this end, the ISCO has been "adapted" but we have not been able at this stage to receive that "adapted" version.

As concerns the Eurostat version of the ISCED Classification, it is being used in the statistical machinery only when European comparisons are involved. It is of no real relevance for purely national purposes: the French level structure is much better adapted to the ways French key players in the education and vocational training field deal with each others. In a European dimension it can however not be ignored and represents an important tool for comparisons, negotiations and understanding of one another systems. The outcome of its set-up is however as much a matter of "political" negotiations than it is a matter of "scientific" base.

3. Case studies

As specified earlier in the report, the focus of the case studies are the "standards", that is the frames of reference around which the certification is being developed.

General presentation

These two industries offer strikingly different profiles:

- in the construction industry, the procedure in force fits in with the diploma production framework of the Ministry of Education and follows a pattern of wide ranging consultation within the Vocational Advisory Commissions (CPC);
- in the health care sector, regulations governing the professions have an impact on the training programme regulations which come under ministerial authority (Ministry of Health). This regulatory link defines a much more closed labour market than in the construction industry since holding a title is required to practise the profession.

As a result there are two conceptions for setting up diplomas:

- in the construction industry, the emphasis is on adapting to the job market, taking innovation into account and searching for consensus among the players;
- in the health care sector, the emphasis is on observing occupational standards and on the correspondence between training programmes and activities defined in the regulations and the pursuit of minimum adaptation to stay within the prescribed, pre-established framework. In reality, industry innovations are addressed through the large role of practical experience in occupational environments (for example, for nurses, of the 4,760 hours in training, 2,275 are spent in health care facilities). Consequently, formal academic programmes undergo few changes.

3.1 Give the description of the procedure for the development of standards as recently executed in two sectors (health care and the construction industry)

3.1.1 People involved

a) Construction industry

The people involved act at the national level within the framework of the construction public works industry Vocational Advisory Commission (CPC), which is attached to the Ministry of Education. Like the Vocational Advisory Commissions of other industries, this commission includes four bodies:

- employer representatives, including, if necessary, representatives of the public sector and

craftsmen, proposed by the most representative organisations;

- employee representatives, proposed by the most representative unions;
- government representatives, including at least one representative from the ministry responsible for employment, one from the ministry responsible for vocational training, two from the Ministry of Education, one representative from Céreq and, given the nature of the training programmes under consideration, representatives from the appropriate ministries;
- qualified individuals, including five representatives from secondary education staff recommended by the most representative unions, one representative from the chambers of commerce and industry, one representative from the guild chambers and, if necessary, one representative from the chambers of agriculture, two representatives from the most representative parents' associations and a technical education advisor.

For the construction industry, the employers' representatives include members of the construction and public works federation and a federation that regroups craftsmen. The employees' representatives belong to the major unions of the sector.

It should be noted that in addition to their official members, the professional commissions invite numerous guests depending on the issues under consideration. The secretariat is located in an office in the Vocational Training Sub-Section of the Ministry of Education. Generally, the emphasis is on the participation of the greatest number possible of those affected by their deliberations while remaining manageable as a group. The number of representatives is set at a maximum of ten per college with the possibility of inviting guests.

a) Health care

The list of people involved is much less formalised and publicised. One could think that the methods here are not too far off from those in the construction industry, but the state authority represented by the Ministry of Health is much more assertive and imposing in tone. Given its responsibility for training, this ministry could set up its own commission but has not done so. In fact, this training mission is considered predetermined by professional regulations and this being so it is assigned to a ministerial sub-division called the Health Care Profession Sub-division. In any event, the perspective here is always nation-wide.

3.1.2 Procedures step by step

a) Construction industry

The procedure is described in the point 1.1.3 mentioned above.

a) Health care

There is no information about chronological methodology.

Time span

a) Construction industry

It has been agreed that the diplomas applying to the largest numbers of people must be reviewed every five years. According to estimates, it seems that this rule is respected resulting in eighty percent of the students taking training programmes that are reviewed within the stipulated time span.

Furthermore, with rare exceptions the procedure for creating or reviewing a diploma lasts one to three years, from starting off the procedure to implementing the revised diploma or introducing a new one. The difference in time spans can be explained by the nature of the change involved:

- setting up new diplomas requires installing equipment in the schools and training the teaching staff, activities that involve longer time spans;
- conversely, it is difficult to shorten the time span to under a year given the constraints imposed by the organisation of the school year and examinations.

a) Health care

Here diploma updating is quite moderate, occurring about every three years according to procedures requiring very few formalities.

3.1.4 Which aids and appliances, resources and instruments were used?

a) Construction industry

In the Vocational Advisory Commission, the procedure is standardised and includes elaboration of three detailed frames of references (see "Elaboration of occupational standards. French contribution", pages 3 and 4).

Furthermore, the commission can request the opinion of experts or consulting firms to support its opinion.

a) Health service

Procedures are not as formalised as in the construction industry. Nevertheless experts or consulting firms may be called upon.

3.2 Describe the procedure(s) for the validation of standards in these two sectors

a) Construction industry

The Vocational Advisory Commission fulfils the double function of elaborating and validating standards.

a) Health service

Diplomas deliberately go through a specific standards validation procedure, which certifies titles and diplomas. The certification procedure makes it possible to position titles other than higher education diplomas and diplomas awarded by the Ministry of Education on the level and specialisation grid, thus assuring mutual validation and comparability. To obtain certification one must file a request and submit standardised supporting documentation. Subject to derogation granted for apprenticeship training programmes, one of the other conditions is that certification of a title can only be applied for after looking at the professional integration results of three graduating classes in possession of the said title.

The request for certification is examined by a commission composed of the president, vice-president and official recorder. In addition, the following are included:

- the vocational training delegate or his representative;
- the president of the co-ordinating committee for regional vocational training and apprenticeship programmes or his representative;
- one representative from the following ministries:
  - the Ministry of Education in charge of higher education.
  - the Ministry of Finance.
  - the Ministry of Public works, Housing, Transport and Maritime Affairs.
  - the Ministry of Defence.
  - the Ministry of Agriculture and Forestry.
  - the Ministry of Employment and Vocational Training.
  - the Ministry of Health and Welfare.
  - the Ministry of Industry and land development.
  - the Ministry of trade.
  - the Ministry of Public administration.
  - the Ministry of Culture and Communication.
  - the Ministry of the Interior.
  - the Ministry of Research and Technology.

- five representatives from employee unions and five from employer organisations;
- four representatives from bodies affected by vocational training and social mobility:
  - the permanent assembly of the chambers of commerce and industry.
  - the permanent assembly of the guild chambers.
  - the permanent assembly of the chambers of agriculture.
  - the education federation.
- the director of Céreq or his representative;
- the director of the National Conservatory of Arts and Crafts.

3.3 Describe the assessment of the procedures by people directly involved

Workability of the steps and criteria for classification

a) Construction industry

The main difficulty arises from the characteristics of this sector, which encompasses large size firms as well as craftsmen. The former push for relatively transversal training programmes while the latter would like very narrowly targeted training programmes for a specific craft. It seems that after having demonstrated a desire to encourage transversal programmes, the education system is reconsidering its basic position and developing diplomas that are more focused, perhaps by differentiating more sharply between diplomas used for professional integration and those the objective of which is continuing education.

a) Health care

The intermediate health care professions, especially nurses, are demanding a higher level of recognition for their title, given the number of years that they must study. This demand has been rejected by employers, including the public sector, to the extent that satisfying it would destabilise the organisation of the profession and sharply increase labour costs.

Compromises negotiated

a) Construction industry

Compromises have been reached by creating quasi-diplomas using the possibilities of waivers afforded by the system. One favoured possibility has been the creation of additional distinctions that make it possible to acquire a specialisation on top of a general diploma.

b) Health care

Different forms of specialisation have been set up (anaesthetist, intensive care nurse etc.) in order to provide career advancement.

Opinion of the quality of the results

a) Construction industry

Generally the job structure in the construction sector is seen as quite fragmented, which explains the high number of diplomas. Some have interpreted this phenomenon as the result of "conservative" behaviour on the part of professionals in the sector, who are attached to the system of trades. Their complaint is that the training programmes available to them are too general and do not enable trainees to acquire the basics that remain the foundation of the qualification.

a) Health care

The main criticism is that the regulations in force tend to slow down innovation thereby freezing the system. In this situation, the training only reflects a wider professional problem.

Bottlenecks and other emerging problems

a) Construction industry

The main issue concerns adapting quickly to changes, given a certain slow reaction time of the system. Furthermore, the certification of adults raises the problem of a stronger break between certification and training as well as the subject of recognition of knowledge acquired through experience. Responses to these issues are still not very forthcoming.

a) Health care

On this question, the most pressing issue is comparing titles with those of other European countries and comparing management models for medical treatment as well as the possibilities for intervention of different professionals. This issue is part of the larger issue of the unrecognised work that is effectively performed but hidden behind the work prescriptions as defined in regulations.

4. Expert opinion

What has appeared to us as most obvious when trying to give answers to the grid of questions, is that classifications and standards do not play the same role and that it is therefore quite impossible to deal with them in an interwoven manner.

The use made of the term *standards* in the common frame of questions has a double meaning. Sometimes it refers to the classifications themselves, which help order, the various training categories. On the other hand, it does sometimes refer to the norms used to organise the training offer.

In our sense, standards are quality items that define the qualifications, while classifications are by-products of social negotiations. Whether links can be built between them depends on the status of these negotiations.

Bibliography

Affichard J. (1983): *Nomenclatures de formation et pratiques de classement*, Formation Emploi nr. 4, octobre-décembre, pp. 47-61.

Fourastié J. (1963): *Image de la population active en 1975 selon le niveau de qualification*, Population, juillet-septembre.

Commissariat général du Plan d'équipement et de productivité, V^{ème} Plan 1966-1970, Rapport général de la Commission de la main-d'œuvre, mars 1966.

Vimont, C. et N. Dubrulle (1966): *La prévision de l'emploi dans le cadre du V^{ème} Plan en France, 2ème partie: Essai de calcul des besoins de recrutement par niveau et type de formation*, Population, septembre-octobre.

Conseil National de l'Information Statistique (1994): *Nomenclature des spécialités de formation – guide d'utilisation*, Journal Officiel, Paris.

Annex

Specialisation group

1 - Field of discipline

Specialisation groups in 17 categories	Specialisation groups
10 - GENERAL TRAINING PROGRAMMES	100 - General training programmes
11 - MATHEMATICS AND SCIENCES	110 - Multi-discipline specialisations
	111 - Physics - chemistry
	112 - Chemistry-biology, biochemistry
	113 - Natural sciences (biology-geology)
	114 - Mathematics
	115 - Physics
	116 - Chemistry
	117 - Earth sciences
	118 - Life sciences
12 - SOCIAL SCIENCES AND LAW	120 - Multi-discipline social sciences and law
	121 - Geography
	122 - Economics
	123 - Social sciences (including demography and anthropology)
	124 - Psychology
	125 - Linguistics
	126 - History
	127 - Philosophy, ethics and theology
	128 - Law, political science
13 - ARTS AND LETTERS	130 - Literary and multi-purpose artistic specialisations
	131 - French language, literature and civilisation
	132 - Visual arts
	133 - Music and the entertainment arts
	134 - Other artistic disciplines and multi-purpose artistic specialisations
	135 - Ancient civilisations and languages
	136 - Living languages, foreign and regional civilisations

2 - Technical-professional production fields

Specialisation fields in 17 categories	Specialisation groups
20 - MULTI-TECHNOLOGY PRODUCTION SPECIALISATIONS	200 - Basic industrial technologies (industrial engineering, manufacturing processes and specialisations with a dominant functional characteristic)
	201 - Industrial manufacturing control technologies (automated controls, industrial robotics and industrial computerisation)
21 - AGRICULTURE, FISHING, AND PARKS AND GARDENS	210 - Multi-purpose specialisations in agronomy and agriculture
	211 - Plant production, specialised crops and crop protection (horticulture, viniculture, fruit farming etc.)
	212 - Animal production, specialised breeding, agriculture, animal care, including veterinary care
	213 - Forest, nature and wildlife, fishing
	214 - Landscaping (parks, gardens, green spaces and sport grounds)
22 - MANUFACTURING	220 - Multi-technology manufacturing specialisations
	221 - Food processing and food production
	222 - Manufacture of chemicals and related products including the pharmaceutical industry)
	223 - Metallurgy, including the steel and iron industry, casting, non-ferrous metals, etc.)
	224 - Construction materials and ceramic glass
	225 - Plastics technology and composite materials
	226 - Paper and paperboard
	227 - Energy, and climatic engineering, including nuclear, thermal and hydraulic energy and uses in refrigeration, air-conditioning and heating
23 - CIVIL ENGINEERING, CONSTRUCTION, WOOD AND WOOD DERIVATIVES	230 Multi-technology specialisations, civil engineering, construction and wood
	231 - Mines and quarries, civil engineering and topography
	232 - Construction of structures and coverings
	233 - Construction: finishing work
	234 - Woodworking and furniture
24 - FLEXIBLE MATERIALS	240 - Multi-technology flexible material specialisations
	241 - Textiles
	242 - Clothing, including fashion and clothes making
	243 - Leather and fur

25 - MACHINERY, ELECTRICITY, ELECTRONICS	250 - Multi-technology mechanical and electric specialisations, including machine and electricity maintenance
	251 - General, precision and milling machinery
	252 - Motors and automobile machinery
	253 - Space and aeronautical machinery
	254 - Metal structures, including welding, car bodies, ship hulls, aeroplane fuselages
	255 - Electricity and electronics, excluding automatic controls and computer-assisted production

3 - Technical-professional service fields

Specialisation fields in 17 categories		Specialisation groups
30 - MULTI-PURPOSE SERVICE SPECIALISATIONS	300 -	Multi-purpose service specialisations
31 - TRADE AND MANAGEMENT	310 -	Multi-purpose trade and management specialisations, including general management of companies and government bodies and agencies
	311 -	Transport, handling and warehousing
	312 -	Commerce, sales
	313 -	Finance, banking, insurance
	314 -	Accounting, management
	315 -	Human resources, personnel management, employment management
32 - COMMUNICATION AND INFORMATION	320 -	Multi-purpose communication specialisations
	321 -	Journalism and communication, including graphic communication and advertising
	322 -	Printing and publishing techniques
	323 -	Audio and imaging techniques, including related entertainment industry jobs
	324 -	Clerical and office jobs
	325 -	Documentation, library and data management
	326 -	Data processing, information management, data transmission networks
33 - SERVICES TO INDIVIDUALS	330 -	Multi-purpose health care and social specialisations
	331 -	Health
	332 -	Social work
	333 -	Teaching, training
	334 -	Tourism and hotel business
	335 -	Leisure, sport and cultural animation
	336 -	Hairdressing, beauty care and other service specialisations to individuals

34 - SERVICES TO GROUPS	340 - Multi-purpose service specialisations to groups 341 - Town and country planning, city planning, economic development 342 - Protection and development of the cultural heritage 343 - Waste water treatment, street and other cleaning, environmental protection 344 - Personal and property security, police, surveillance, including hygiene and safety 345 - Enforcement of rights and status of individuals 346 - Military specialisations

4 - Personal development fields

Specialisation fields in 17 categories	Specialisation groups
41 - FIELDS OF INDIVIDUAL CAPACITIES	410 - Specialisations involving several capacities 411 - Sports, including the martial arts 412 - Development of mental capacities and basic apprenticeship of skills 413 - Development of behavioural and relationship capacities 414 - Development of organisational skills in individuals 415 - Development of capacities for orientation and social or professional integration or re-insertion
42 - FIELDS LEISURE AND DAILY ACTIVITIES	421 - Games and activities specific to leisure activities 422 - Household economics and activities 423 - Family life, social life and other training programmes for personal development

IV. The Netherlands

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1. The history of the national classification system of vocational standards in operation in the Netherlands

1.1 History of vocational structures

Secondary VET (*Vocational Education and Training*) is part of the initial education infrastructure. Before the 1997 vocational education reform, the Dutch secondary VET system consisted of several independent tracks and levels. Besides secondary VET junior secondary pre-vocational education (*Voorbereidend BeroepsOnderwijs,* VBO) and higher professional education (*Hoger BeroepsOnderwijs,* HBO) are members of the initial VET family:

- Junior secondary pre-vocational education (*Voorbereidend BeroepsOnderwijs,* VBO)

Till 1999 *VBO* was one of the four types of general secondary education. The name suggests that this type of school covers vocational education. This was, however, hardly the case anymore. The first two years (out of four) were devoted to general subjects, while in the last two years, in combination with general subjects, lessons were given in vocationally oriented subjects. With the junior secondary pre-vocational education certificate, pupils could go on to the apprenticeship system and/or school-based senior secondary vocational education.

Since 1999 VBO and MAVO (*Middelbaar Algemeen Vormend Onderwijs,* Secondary General Education) are merged into VMBO (*Voorbereidend Middelbaar BeroepsOnderwijs,* Preparatory Secondary Vocational Education. VMBO has been organised in four tracks, ranging from full time academic till full time practice based training. All tracks are preparing for Secondary Vocational Education, for VMBO is not seen *as* the end of somebody's initial education pathway.

- Secondary vocational education

Till 1997 Secondary vocational education consisted of three types and three levels of vocational education:

(i) school-based full time 3-years short secondary vocational education (*Kort Middelbaar Beroepsonderwijs;* KMBO);

(ii) school-based 4-years secondary vocational education (*Middelbaar Beroepsonderwijs;* MBO);

(iii) a three level apprenticeship system.

- Higher professional education

Higher professional education is part of higher education (*Hoger Onderwijs*). The other part being University education. Usually higher professional education is regarded as a part of the Dutch VET structure as it is, like secondary vocational education, in fact preparing its students for an occupational career. Students in higher professional education are coming either from secondary general or secondary vocational education.

1.2. The history of vocational standards

In the early seventies, Dutch employers complained there was a broad gap between the labour-market needs and the contents of secondary vocational education. Learning outcomes were regarded to be too academic and lagging behind. Responding to this outcry a high profile committee advised the Dutch government to invite social partners to take part in standard and qualification development for secondary vocational education. The 'second report' of this advisory committee on progress in industrial policy, usually addressed as the 'Wagner Committee' suggested national sector organisations should be responsible for updating standards and qualifications (1985).

Till that time a formal role in standard development for social partners was limited to curriculum development for the apprenticeship system. Whenever standards for an apprenticeship had to be updated, a *totaalprogrammacommissie* (curriculum committee) was installed to do the job. Experts from trade and industry and education drew up the curriculum and examination program at joint responsibility. This was not the case in full time secondary vocational education. Standards and qualifications for school-based secondary vocational education were in fact defined by the schools themselves, no formal representation of trade and industry was needed.

The government accepted the Wagner recommendations and a 'procedure for translation occupational profiles (validated by social partners) into vocational profiles (validated by social partners and education)' was implemented for all types of secondary vocational education. At that time long and short secondary vocational education systems got their national qualification committees, the so called committees for sector consultation between education and trade and industry (*Bedrijfstakgebonden Overleg Onderwijs Bedrijfsleven; BOOB's*). Their position was quite similar to the apprenticeship's curriculum committees. The *BOOB's* produced their first generation standards (attainment targets) in 1989.

n fact, these first generation attainment targets were never accepted by the government, owing to their bad quality. *BOOB's* were supposed to produce the new standards in a very short period of time. Most of them took the easiest way out and presented the existing attainment goals as the new standards. Eventually the second generation was produced in 1993.

At the same time a new advise ('Rauwenhoff Committee', 1990) pleaded for better structural

and organisational relations between secondary vocational education and trade and industry. This advise lead in fact to the establishment of a national qualification structure for secondary vocational education. In 1992 National Bodies for Vocational Education (*Landelijke Organen Beroepsonderwijs; LOB's*) were made responsible for the development of national standards for the apprenticeship system and the two types of school-based secondary vocational education, taking over the role of the *BOOB's* and the apprenticeship curriculum committees. In 1997 the *LOB's* produced the third generation of standards for all types and levels of secondary vocational education. In fact, standards were produced for four types of secondary vocational education, because as an effect of the 1997 Act on secondary vocational and adult education (*Wet Educatie en Beroepsonderwijs;* WEB) a new level was introduced. The new Act will be discussed in the next paragraphs.

1.3 The 1997 innovations in secondary vocational education

On January 1st 1997 the Adult Education and Vocational Training Act (WEB) took effect. The *WEB* intended to bring more cohesion in secondary vocational education and between secondary vocational education and adult education. This was done by (i) the introduction of two qualification frameworks; a four level framework for secondary vocational education and a six level framework for adult education, and (ii) a major merging operation. In the new education concept for vocational education, no learners will leave Regional education Centres (*Regionale OpleidingsCentra;* ROC), or education for that matter, without a national qualification at a certain level. If they have completed their programme successfully, they are awarded a diploma. This does not mean, however, that dropouts are left empty-handed. Each qualification is divided into Units, or partial qualifications. For each of these units one receives a certificate. Only after having obtained all certificates one has a right to obtain a full diploma though. Unit certificates are not meant to have a currency on the labour market. In the four-level secondary vocational education framework the basic occupation level, level 2, is regarded as the minimum qualification level every person should have reached. Everyone should be entering the labour marked as a skilled worker. Education at this level is aiming at acquiring the skills needed to perform somewhat complicated routines and standard procedures. The workers' responsibilities are limited to his/her specific job position.

The first level (assistant) is new in the qualification framework. It was created to allow learners, unable to acquire a level 2 qualification to enter the labour market with an MBO diploma. Despite politic rhetorics claiming level 2 to be the absolute minimum, trade and industry need qualified employees at this level apparently. Compared to the skilled worker, the assistant will perform less complicated work.

All types and levels of secondary vocational education and adult education are supposed to be organised by these *ROC's*. From that time all types and levels of secondary vocational education, the apprenticeship system included, were called MBO. Full time vocational education and apprenticeships were rearranged into two tracks. Each qualification at each level can be obtained by two tracks from that moment on:

- block or day release, equivalent to the old system of apprenticeship training. In this track practical training will take up at least 60 % of a course. This track is called the vocational guidance track (*Beroepsbegeleidende leerweg;* BBL*)*;

- school-based vocational education, equivalent to the former 3 years or 4 years secondary vocational education courses. In this track practical training will take up between 20 % and 60 % of a course. This track is called the vocational education track (*Beroepsopleidende leerweg;* BOL*)*.

The WEB created a self-regulating system keeping the various actors in balance. One important element of that system is the performance-based funding scheme, which had become into effect in the year 2000. Funding for vocational education will be based on the number of participants and number of diplomas provided. *ROC's* having a low intake level will receive a special increase in funding. The purpose of this system is to increase the success rate in terms of diplomas and to prevent dropping out. Educational institutions will be encouraged to guide participants towards a final diploma as efficiently and effectively as possible.

ROC's are able to offer a broad range of initial and post-initial degree programmes in their region. They occupy a central position in their region regarding the labour market oriented instruction of young people. In addition, they guide and train adults and youth with a vulnerable position on the labour market and provide local labour market oriented training for employees and the unemployed. *ROC's* possess a great deal of autonomy, allowing them to develop a policy, gearing to the needs of the region. An example of this is the possibility to develop educational tracks tailored to individual needs and abilities, or a further elaboration of the national exit qualifications in consultation with the regional business community.

The WEB also aims to establish a better link between education and the labour market. This is done by:

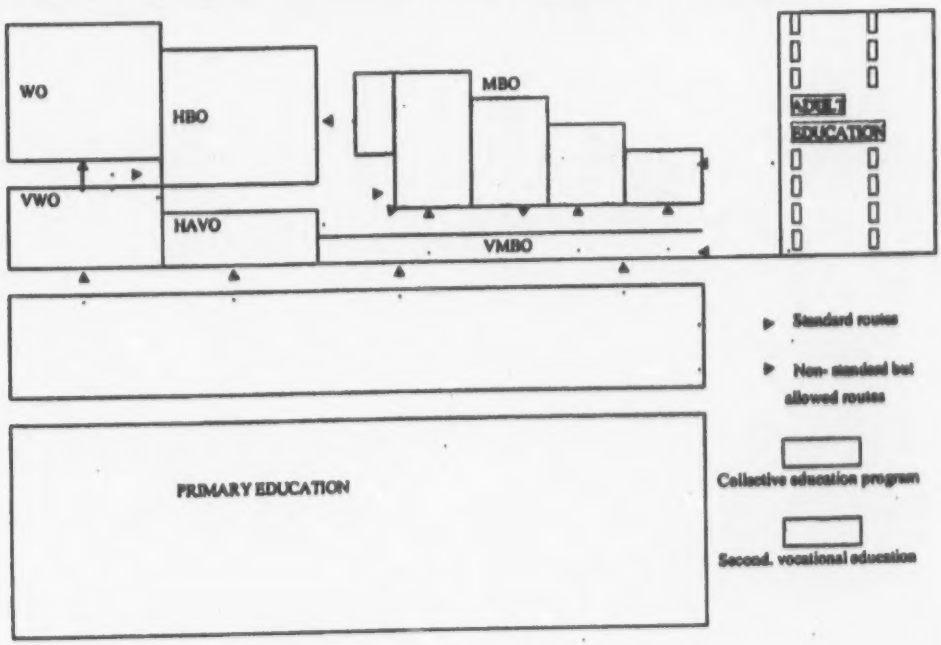
1. sharing responsibilities for the development of standards and qualifications between education and social partners;

2. allowing a lower portion of education time to be spent in vocational practice;

3. establishing relations with local employers and union representatives on behalf of school policy making.

Figure 1 visualises the four MBO levels, embedded in the Dutch initial education infrastructure:

Figure 1: secondary vocational education as a part of initial education in the Netherlands



All qualifications intended for government-funded vocational education programmes have to be registered in the Central Register for Vocational Education (*Centraal Register Beroeps Opleidingen;* CREBO). The register records which *ROC's* provide programmes for which qualifications. The register also clarifies which qualification-based programmes are government-funded and which examination institutes are accredited to provide 'external verifications' of the school-based examinations. CREBO makes it easier for everyone to find out which programmes are on offer in vocational education, what qualifications are available and what standards are included in the respective qualifications. CREBO is updated annually jointly with the Minister of Education, Culture and Science and the Minister of Agriculture, Nature Management and Fisheries (responsible for Agricultural VET) and will apply for the following school year. *ROC's* must report their programmes prior to 1 October at the latest. In the meantime, the *LOB's* may advise on the classification framework formalised in the register.

Another innovation in the WEB concerns the fact that non-government-funded educational institutes are allowed to provide programmes for the qualifications defined in the qualification framework. Qualification based programmes at secondary vocational education level can be provided by state-funded and private educational institutes. State-funded *ROC's* and private educational institutions offering must meet the same conditions. For example, they both have

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to follow the rules with respect to CREBO accreditation and quality assurance. On the other hand, it will be possible for *ROC's* to offer privately funded programmes for the so-called *other qualifications.* In this way, a system is created in which state-funded and private institutes participate on an equal footing - and consequently competence between the two sub-systems is stimulated.

1.4. The levels of the Dutch secondary vocational education qualification framework

The 1997 Adult Education and Vocational Education and Training Act (*Wet Educatie Beroepsonderwijs;* WEB) introduced a consistent and transparent framework of qualifications in secondary vocational education. The four-level qualification framework consists of all standards, organised in qualifications education should achieve. It is the *ROC's* responsibility to develop the programmes for meeting the standards:

The objective of the new framework was to have a simple and coherent framework with qualifications divided into units. Each unit is being accredited, making it possible for learners to switch from one education course to another at the same or at another level:

Table 1: the levels in the Dutch qualification framework

Level 1:	Training to the assistant level
Level 2:	Basic vocational education
Level 3:	All round workers
Level 4:	Middle-management education and specialist education

In the Netherlands level 2 is regarded to be the minimum level for entering the labour market and staying lifetime employable. The assistant level, level 1, is designed for those who are not able to obtain a qualification at level 2. Compared with workers with level 2 qualifications, assistants are supposed to carry out less complex procedures, usually requiring a less rapid response.

Level 2 is regarded to be the basic level: the minimum qualification level anyone should have when entering the labour market. People with a basic qualification are capable of carrying out relatively complex routines and standard procedures, with responsibility for their own work only.

People with a level 3 qualification will normally have responsibilities over and above their own duties. They must be able to account for their actions to colleagues and monitor and supervise the implementation of standard procedures by others. They will also be capable of devising preparatory and supervisory procedures.

The fourth level (middle management or specialist) requires non-job-specific skills such as tactical and strategic thinking and involves responsibilities in keeping up such skills.

1.5 The new roles for LOB's and ROC's

Vocational education should better match the demand of the labour market and the requirements expressed by business and industry. This is the basic thought laying behind the introduction of the Dutch qualification framework. *ROC's (Regionale OpleidingCentra;* Regional Education Centres) should provide vocational education and training for a great variety of learners, being young people finalising initial education, young unemployed, young workers, people looking for work, adults, immigrants and handicapped people. All need made to measure educational solutions. *ROC's* are supposed to provide these solutions, though government-funded solutions should be organised with the framework of the new qualification framework.

It is the task of business and industry is to indicate the qualifications these people needs. Twenty-two sector-based National Bodies for Vocational Education *(Landelijke Organen Beroepsonderwijs; LOB's)* have been made responsible for the development of standards and qualifications for their sector (see annex 1). One could say there are in fact 22 qualification frameworks, each sector having a number of qualifications defined at each level. The 22 National Bodies are supposed to draw up occupational profiles, deriving standards and qualifications from these profiles. An occupational profile is a description of the most important and indeed most common activities in a specific occupation. Procedures for the development of occupational profiles presuppose close consultation with business and industry. The hallmark of the Dutch procedures is that the sector's social partners have to legitimise these occupational profiles.

On the basis of a legitimised occupational profile, a National Body will develop the standards, organised into units. Each qualification consists of a number of units. Besides vocational standards, each qualification has to contain general (social and personal) standards and standards needed to move up to a higher qualification level. Representatives from the schools are involved in this procedure. Standards and qualifications have to be approved by the Ministry of Education if the qualifications will be used for secondary vocational education. The sector's qualification framework can include qualifications not indented to be used in secondary vocational education, but for instance for training and retraining working people: the so-called *other qualifications* ([23]). The concept of the qualification structure is that it should not only be used to express the sector's education policy for secondary vocational education, but should also be used for policymaking in continuous vocational education and training and for the assessment of prior learning (APL). In 1998 the Dutch qualification framework had 710 qualifications all together (see table 2: overview of the numbers of qualifications in 1998).

([23]) The length of the programmes preparing for an *other qualification* should be at least 15 weeks.

Table 2: overview of the number of qualifications in 1998

Level	Name of the level	# qualifications
1	Assistant	54
2	Basic vocational	198
3	All round	208
4	Middle-management	146
4	Specialist training	67
-	Other	31

ROC's don't organise education programmes for all qualifications though, for they only offer programmes for qualifications attracting sufficient numbers of learners. It is clear nevertheless that most qualifications are meant to be used in government-funded secondary vocational education. Qualifications and the qualification framework are hardly used for other purposes: qualifying continuous education and training and APL.

2. The new qualification framework in detail

As said before, the Netherlands recently switched to a new level of classification primary to be used to classify qualifications to be obtained in secondary vocational education. In this classification not the curricula, but only the standards, organised in qualifications are classified.

The organisation of the education programmes, leading to these qualifications is not laid down. Each *ROC* is free, within certain margins, to organise education in any way it sees fit. In developing the format for the national qualification structure (1992/1993), much work has been done by a working group in which CIBB (now CINOP), some National Bodies and COLO, the National bodies' association, took part. The working group's definitions, referred to as *the format,* were adopted by the Ministry of Education and were implemented in the 1997 Act on adult and vocational education. This chapter deals with the work of this group and presents the definition of standards, which were used in the end.

2.1 The development process of the qualification framework

In developing the Dutch ***format for the national qualification framework***, i.e. the definitions to be used in the Dutch qualification framework, the SEDOC ([24]) definitions and other relevant frameworks were studied: ASF, NVQS and CBS ([25]). The working group adopted the following procedure in developing the Dutch qualification framework:

STEP 1	studying national and international classification frameworks
STEP 2	selecting classification criteria
STEP 3	drawing up definitions of criteria for the classification of levels
STEP 4	scaling these classification criteria
STEP 5	defining the levels of the qualification structure

Step 1 & 2: studying classification systems and selecting criteria

After comparing documents and analysing overlap, some emerging criteria were not chosen at all, i.e.:

- most appropriate education or training;
- length of the specialist experience;
- whether or not completed an education programme;
- leadership.

The working group arrived at least at 5 possible appropriate criteria for the classification of levels:

1. independence (I);

2. responsibility (R);

([24]) The 1985 European five level framework is called the SEDOC classification in the Netherlands. Although this name is not correct, even in official documents this framework is refurred to as SEDOC.

([25]) ASF: Australian Standard Framework; NVQS: (English) National Vocational Qualification system; CBS: the classification of occupations applied by the Dutch Statistical Office, Centraal Bureau voor de Statistiek

3. complexity (C);

4. theoretical and practical level (T/P);

5. transfer (TR).

Of these five criteria, two ('independence' and 'theoretical and practical level') were dropped because they did not meet the following requirements:

1. criteria must be fit to be used independent from learning venues (workplace, school);

2. criteria must be fit to level occupational practice;

3. criteria must be fit to be used in (international) communication.

Independence was dropped because everyone carries out work independently, regardless of the level at which one operates. It is therefore not possible to put this criterion into practice and to be able to measure it. The essential issue is in fact the degree of responsibility someone has.

What is actually indicated by *theoretical and practical level* are the cognitive skills and psychomotorial skills. With this the nature of the skills is stated and not the level. The situation must be avoided where implicit cognitive skills are placed at a higher level than psychomotor skills.

Step 3 & 4: drawing up level criteria

In the definitions of three remaining criteria, the term *degree* indicates that a scale can be identified. The term *actions* has been chosen, as this can be translated into occupational practice (activities) and education (skills):

(1) Responsibility: the degree in which occupational actions have consequences for the execution of occupational actions executed by others. The level of responsibility refers to the impact of one's activities on the occupational actions of others:

1. one is responsible for one's own activities only;

2. non-hierarchical responsibility; meaning mutual responsibility for one's own activities and the activities of colleagues (in a team, group, gang);

3. hierarchical responsibility in relation to monitoring, supervisory and managerial tasks.

(2) Complexity: the degree in which occupational actions are based on standard procedures:

1. automated routines; mostly algorithms automatically executed;
2. application of standard procedures; mostly non-automatic algorithms;
3. combining standard procedures; mostly skills in problem solving using familiar procedures;
4. developing new procedures; application of problem-solving skills resulting in new solutions, possibly adding new aspects to an occupation.

(3) Transfer: the degree in which occupational actions can be applied in a variety of occupational situations :

1. job-related skills; skills linked to a part of a production cycle;
2. occupation-related skills; skills linked to production techniques;
3. occupation-independent skills; skills applicable in a variety of occupations/jobs.

The next three tables indicate how level indicators have to be interpreted when allocating qualifications to levels. The differences in length of the bands suggest that even within a category, for instance *hierarchical responsibility,* sublevels can be identified. There are no rules for that, however. It is the *LOB's* job to identify those sublevels.

Table 3: relations between degrees in responsibility and levels

Responsibility			
level 5			
level 4			
level 3			
level 2			
level 1			
	responsible for his/hers own work	collective/co-operative responsibility	hierarchical responsibility

Table 4: relations between degrees in complexity and levels

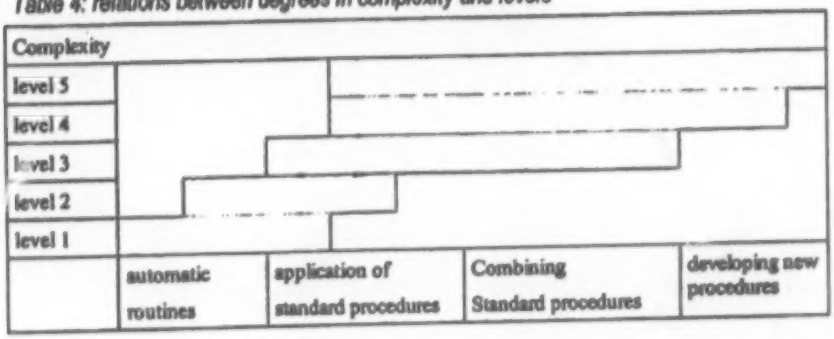
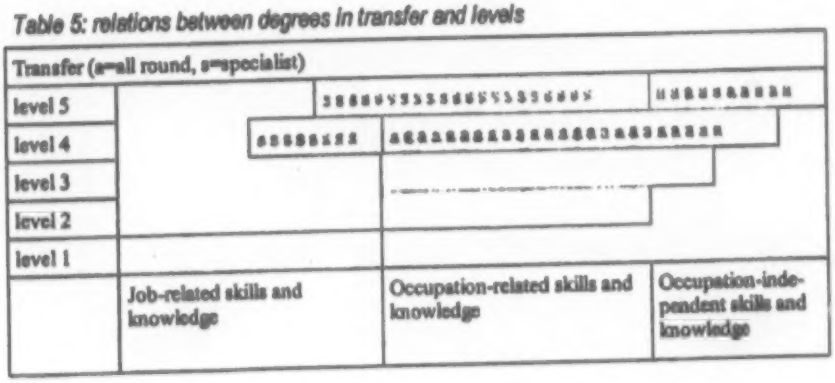


Table 5: relations between degrees in transfer and levels



Step 5: defining the levels of the qualification framework

Level 1 (assistant)

This worker is responsible for the execution of his own work. The work consists primarily of the application of automated routines and only to a limited extent the application of standard procedures. It involves job-related skills and knowledge.

Level 2 (basic occupational practitioner)

This worker is responsible for the execution of his own work. In addition there is a collective, co-operative responsibility in the work whereby co-operation with colleagues takes place. The work consists of applying automated routines and standard procedures. It involves occupation-related skills and knowledge.

Level 3 (all round occupational practitioner)

This worker is responsible for the execution of his own work and must also account for his

actions towards colleagues (non-hierarchical). In addition he bears explicit and hierarchical responsibility: he monitors and supervises in the application of automated routines and standard procedures. His work comprises the application of standard procedures and combining standard procedures. In addition he combines or devises procedures, in the light of work preparation and supervisory activities. It involves for the most part occupational skills and knowledge.

Level 4 (middle management practitioner)

This worker is responsible for the execution of his own work and must also account for his actions towards colleagues (non-hierarchical). In addition he bears explicit hierarchical responsibility; this responsibility concerns planning and/or administration and/or management and/or development of the whole production cycle. Furthermore he combines or devises new procedures. It involves specialist skills and knowledge and/or occupation-independent skills and knowledge.

For the sake of completeness, the definition of level 5 is added here. This level is not a component of the qualification framework. From the point of view of secondary vocational education, education programmes offered in higher professional education is regarded to be level 5. Higher professional education itself does not use this level indicator though.

Level 5

The occupational practitioner is responsible for the execution of his own work and must account for his own actions (towards colleagues) (non-hierarchical). This work can involve both the application and combining/devising of a limited number of complex standard procedures (specialisations). The work may also include the application, combining and devising of standard procedures for a range of activities (breadth). In addition the occupational practitioner bears explicit hierarchical responsibility; it does not involve responsibility in the executive sense such as is the case with monitoring and supervisory activities, but rather responsibility in a formal, organisational sense. It involves specialised, occupation-independent skills and knowledge. The emphasis is on devising new procedures, tactical and strategic actions and skills with regard to development and execution of policy.

2.2 First experiences with the new framework

In the *Format*, it is stated that the level classification should represent the levels of occupational practice. The classification of qualifications must be based on characteristics of occupations and not derived from the (given) education structure. The Ministry of Education proposed that a link to the European SEDOC five-level framework should be established. The SEDOC classification and the description of the SEDOC levels are however derived from levels in education. It is a training-based classification. It implicitly assumes that the hierarchy in levels of vocational education and training represents a corresponding hierarchy in occupational practice.

The way the National Bodies used the format's definitions is not free from this education-based interpretation though. On the one hand responsibility, complexity and transfer are designated as 'characteristics of an occupation'. Using the criteria in developing a sector qualification framework, a more educational-based approach was chosen quite often, particularly with regard to the complexity-criterion. For example, the remark *'that classifying a qualification to a level can only be done properly when attainment goals are available as a source of information'* illustrates that level classification is more related to educational indicators than to the characteristics of an occupation.

The Dutch descriptors of levels are problematic. In 1997 secondary vocational education curricula had to be adapted to this new qualification and level concept. This was an interesting test case for the application of the newly introduced criteria. The results were rather disappointing as the *ACOA* ([26]) Committee concluded *LOB's* ([27]) interpreted standards, qualifications and levels differently. As a result some sets of sector-based standards are identical to the traditional knowledge based training goals that they were supposed to replace. Qualifications were supposed to be different with regard to (i) the way qualifications are organised in units; formerly units were purely based on educational structures (subjects) and (ii) the selection and wording of standards, which used to be knowledge (subject-) based.

The ACOA Committee also concluded that most *LOB's* adopted fairly formal arguments for allocating qualifications to levels. In fact, their arguments were almost identical to/copied from the definitions presented to them. Comparing the levels in the traditional educational structure and the levels in the new qualification structure shows practically no differences. The old primary, secondary and tertiary apprenticeship training programmes were allocated to qualification levels 2, 3 and 4 respectively. The tertiary apprenticeship programmes were classified as specialist training (level 4). Almost all traditional 4-year *Middelbaar Beroepsonderwijs* courses (secondary vocational education ([28])) are allocated to level 4. ACOA commented that the sector's qualification frameworks were of different quality. Some qualification frameworks appear to be in fact education frameworks, violating the framework's concept that qualifications should be defined independently from learning processes. National Bodies took different lines of approach:

- in some sectors the qualifications and units are defined in terms of occupations and qualifications are allocated to a level using occupation-related criteria;

([26]) The independent Vocational Education and Labour Market Advisory Committee (*Advies Commissie Onderwijs Arbeidsmarkt*) commissioned by the Ministry of Education for the quality assessment of sector related qualifications on all 4 levels.

([27]) *Landelijke Organen Beroepsonderwijs* LOB) are *sector-based* National Training Bodies responsible for the production of – sector specific- qualifications. The task of the LOB's is aimed at the development of qualifications and standards for the four level secondary vocational education.

([28]) This term '*Middelbaar Beroepsonderwijs; MBO*' (literally: secondary vocational education) might arouse some confusion as the meaning has changed. Before the new Act on VET and Adult education was implemented in 1997 the term referred to 4-year school-based vocational courses only. The new Act labels all school-based and dual programmes, either on level 1,2,3 or 4 as *Middelbaar Beroepsonderwijs*.

- in some sectors the qualifications and units (modules) are defined in terms of vocational education and qualifications are allocated to a level using traditional education-related criteria;
- most sectors are mixing up both sets of descriptors and definitions.

The last point is illustrated in the table below. CINOP evaluated the way some *LOB's* used the criteria, presented in the format. The research made it very clear that not only the characteristics of an occupation were deciding in determining the level of a qualification. In the table below the different policies of *LOB's*, apparent from the answers to the questionnaire, are shown. The number of plus signs indicates the dominance of a set of criteria (maximum ++++):

Table 7: type of level indicators used by LOB's

	Occupation-based criteria	Education-based criteria
National Body a	+++	+
National Body b	+	+++
National Body c	++++	
National Body d	+++	+

One explanation for this incorrect use of level indicators might be the fact that most *LOB's* used already existing occupational profiles for qualification development in that period or a bit earlier (within the *BOOB* framework, for instance, see paragraph 1.2). Traditional methods for profile development did not produce occupational data in terms of responsibility, complexity and transfer. Anyway, the *rules of the game* allocating qualifications to levels do not appear to be clear. Using three different criteria (responsibility, complexity and transfer) generates confusion. Which of these criteria is the most important one? And what to do when degrees of complexity vary within an occupation because some activities are more complex than others, which one should be selected? There is much confusion when several degrees of complexity, or responsibility or transfer, are identified in an occupation. In that case committees complain that the corresponding qualification 'cannot be allocated to a level properly'. There are terminology problems as well. People supposed to use the criteria are not familiar with terms like 'automated routines or standard procedures'. Besides they associate complexity rather with the complexity and variety of working conditions and less with routines and procedures; the nature of work on a more abstract level.

A great number of National Bodies adopted formal arguments for justifying the levels which qualifications are given. Characteristic of this formal approach is the (practically identical) adoption of the general description of levels from the format qualification structure. In the case of a branch-specific approach, the argument is derived from a general picture of occupational

practice and the occupational practitioner within this. Through this the occupation which one wishes to qualify for is substantiated in such a classification.

A glance at the new qualification framework makes it clear there is almost *a linear connection* between the old VET hierarchy and the designated level of the (new) qualifications. In other words: the old primary, secondary and tertiary apprenticeship training programmes are placed in qualification level 2, 3 and 4 respectively. The tertiary training programmes are primarily classified as specialist training (level 4). The former 4-year *MBO* courses are nearly all connected with a qualification at level 4. This means that in the development of the qualification structure, the conversion from 'old' to 'new' training programmes available has been dominant policy.

Because of the ambiguity of the definition of levels *LOB's* focus at relative level differences between the qualifications of their own sector ([29]). The position proposed for a qualification in the qualification framework is often more determined by its position relative to other qualifications and patterns of progression in the specific occupational sector, rather than by exact correspondence with the level descriptors. The level assigned to a qualification thus strongly relates to the content of other qualifications in the framework. *LOB's* do not consider the precise equivalence of qualifications (in terms of technical content, intellectual demand etc) at the same level but in different occupational sectors to be such a crucial issue as a 'correct' hierarchy in the specific sector for which they are responsible. As a result, this approach to assigning levels to qualifications makes sense in the context of each specific sector, but results in poor connections with level definitions and equivalences across different sectors and in respect of inter-professional relationships.

2.3 How to avoid bias?

Some people felt that the problems with the new qualification framework were caused by the fact that the criteria listed in the format (Responsibility, Complexity and Transfer) were not clear and comprehensive. The following additions were suggested:

- add indicators for the *'risk of damage'* and *'life-threatening circumstances'* to 'responsibility';
- add indicators for *'specialised skills'* and *'knowledge'*, and *'occupation-independent skills'* to 'transfer';
- add to 'complexity' indicators for *'responsibility for the work, abstraction, safety and environmental requirements, risk of damage, alertness, tolerance to stress and accuracy';*

([29]) Sector-based classifications of qualifications tend to be ordinal scaled, rather than rational. The criteria are used to place qualifications on an ordinal scale, with reference to sector-based qualifications on the same and or on other levels.

- transfer should not only be interpreted in reference to other occupational settings, but also referring to new developments within an occupation.

It is felt that better standard specifications are needed. It is time for a substantive evaluation on the definition of occupational standards and possibilities for sector-specific interpretations or level definitions.

Intensive co-operation between National Bodies must be stimulated, in order to achieve greater effectiveness and transparency of the qualification framework within sectors and between sectors. But above all consensus on the use of the new format and the willingness to discuss it's proper use are needed.

3. Other qualification frameworks

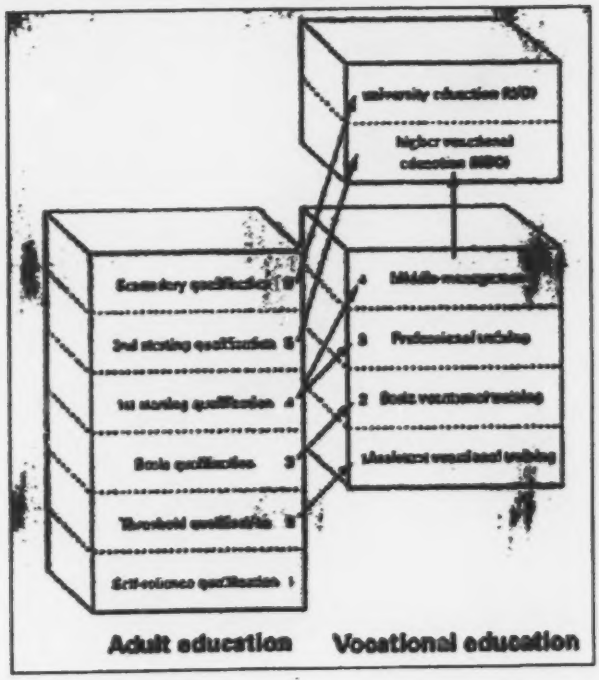
3.1 A framework for adult education

Besides the classification framework for secondary vocational education, adult education is having its own qualification framework. Adult education is intended for adults wanting to upgrade their education level, immigrants and adults in need of support and guidance before being able to enter a secondary vocational education programme. Both vocational education and adult education are provided by *ROC's*. The adult education framework has six levels. Unlike vocational education, adult education is not concerned with qualifying it's participants for a particular occupation. Adult education's goal is to provide a solid basis for vocational and secondary general education. Equally important is that the participants learn how to function in society (self-reliance). Since 1 January 1997, adult education offers four types of programmes:

1. secondary general education (vavo: mavo, havo, vwo);
2. programmes focusing on general personal and social skills;
3. Dutch as a second language (Nt2);
4. programmes focusing on self-reliance.

The schemes pertaining to the first type (vavo), in which the participants may obtain a full or partial mavo, havo or vwo qualification, are identical to those set out in the Secondary Education Act (WVO), being part of initial education (see table 1). The other three types of programmes are defined in the WEB. Ultimately they will available at a number of different levels (see table 8).

Table 8: Qualification framework for adult education



Source: Ministerie van OC&W

3.2 Qualifications in higher professional education

A third qualification framework encompasses the qualifications in higher professional education. Higher professional education provides programmes at one level only. In the eyes of secondary vocational education higher professional education is labelled as level 5. Higher professional education itself seldom uses this level indicator though for it regards itself as a part of higher education ([30]). Programmes to prepare for key competencies were introduced in higher professional education in 1997. Institutes for higher professional education agreed to define school-based curricula on national professional profiles and a curriculum, which is common at 70 %. The sets of attainment goals included in these curricula can be regarded as qualifications.

([30]) According to the Dutch legislation institutes for higher professional education and universities together form higher education (*hoger onderwijs*).

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Qualifications for higher professional education are developed in a rather informal way. Invited by the schools a group of professionals produces a profile for the respective profession. Schools co-operate in developing a so called educational profile covering about 4720 out of the 6720 study hours a course in higher professional education will comprise. The key concept is self-regulation and a high degree of autonomy in the light of professional, sector and regional needs and trends.

Referring to the breadth of qualifications, the situation in higher professional education is changing. In 1995 an influential Report ([31]) concluded that, due to a policy to attract as much students as possible, institutes for higher professional education were inclined to introduce a wide range of new qualifications, either focussing on a narrow segment of business and industry or a wide range of job positions. The Report judged this proliferation of qualifications as unacceptable and leading to much confusion for employers in particular. Eventually this Paper resulted in co-ordinated curriculum development procedures. In 1999 this policy was dropped again. To answer student wishes seems to be the new key policy; freedom of choice. Students will be offered possibilities to compose their own study programme out of units offered by their own and other institutes ([32]). So students will decide about the breadth of qualifications from now on.

3.3 Evaluation

Even in conjunction, these frameworks do not cover the entire field of vocational and professional education programmes and training courses. The two systems are not exclusive, as they do not classify the certificates (qualifications) of many other study programmes and training courses for the working population (post-initial or continuing vocational education). In addition, the Universities have their own two-level classification system; they offer programmes for two degrees: a Master degree programme (in Dutch: *Doctorandus*) and a fixed number of research facilities for PHD degree (in Dutch: *Doctor)*.

([31]) Vereniging van Hogescholen, Niet meer maar beter, verslag van de commissie referentiekader onderwijsaanbod, (1995) Den Haag

([32]) Ministerie van Onderwijs, Cultuur en Wetenschappen, Ontwerp Hoger Onderwijs en Onderzoek Plan 2000, (1999) Zoetermeer

4. Procedures for the development of standards

4.1 The actors

From August 1997, all vocational education programmes must be based on national qualifications and standards. All 22 sector-based National Bodies, were required to develop a qualification framework for their sector, using the criteria and definitions presented in *the format*. There are several parties involved in the determination, monitoring, quality assessment of education qualifications and providing education programmes.

The educational institutions operating in the field of vocational and adult education are the *ROC's* and *AOC's*. The task of the *ROC's* is to offer a comprehensive range of programmes in vocational and adult education: non-formal education for young people, basic adult education, secondary general adult education and senior secondary vocational education, in at least three educational sectors (engineering & technology, economics, social services & health care and agriculture & the natural environment). In most cases *ROC's* will carry out their tasks at various different locations, often even in different municipalities within a single region. *AOC's* or agricultural training centres provide education at the pre-vocational and senior secondary vocational level for the agricultural sector.

The *LOB's* are joint National Bodies for vocational education set up by an industrial sector or an occupational category. In addition to some 21 *LOB's*, which are subsidised by the Ministry of Education, Culture and Science for the development of qualifications and standards, there is another *LOB* for the agricultural sector. The *LOB's* are responsible for the development and the update of qualifications and for quality assessment of workplace training, being a part of all vocational education programmes. In most cases an *LOB* will also organise the research needed to produce occupational profiles. There are no government funds available for profile development though; it is regarded the social partners' responsibility to produce these profiles. Profiles' quality assessment is not part of the Dutch procedures. A profile, to be legitimated by social partners, may not be older than five years however. There are no regulations indicating when standards have to be reviewed. ACOA assumes *LOB's* will review standards every five years, but this is not formalised

The board of an *LOB* consists of the sectors' representatives from employers organisations and unions. Sometimes representatives from education are also invited in the board. All the *LOB's* have the following tasks:

- to define and to update the standards and qualifications for the qualification framework for secondary vocational education;
- to ensure that there are a sufficient number of quality trainee posts available in the sector for learners to have their practical training organised;

- to help companies to upgrade the quality of these posts, if needed.

To every LOB a Committee for Education and Industry (*Commissies Onderwijs Bedrijfsleven;* COB, is attached). This COB has the tasks to propose the standards or attainment goals for each qualification and to categorise these standards into units (partial qualifications) within the framework of a qualification. Besides the COB advises on what level a qualification should be allocated in the sector's qualification framework.

Sometimes when drawing up the occupational profiles *LOB's* invite the COB to be involved in the process. The risk however of involving an often education dominated COB is it's inclination to assess information from an educational point of view. This might cause a certain degree of (educational) bias.

The local government is responsible for actually implementing the WEB when it comes to adult education. The Ministry of Education, Culture and Science is to take a background role with respect to adult education. In its role as administrator and planner, local government receives a budget for adult education in the form of an annual grant. With that grant local councils are supposed to act as the demand party negotiating with local *ROC's* the programmes they should deliver. An ROC is supposed to act as the supply party, responsible for providing adult education programmes as agreed with the council. Local authorities sign a contract with *ROC's* setting out the programmes to be organised, the expected or targeted number of participants, specific target groups, the period of time and the amount of money to be made available.

Trade and industry are important to vocational education because that is where the participants will ultimately end up. The programmes must be well in tune with the needs of the sector. Trade and industry exercise an influence on the contents of the programmes through the qualification framework. That is why business is represented on the boards of an LOB. Trade and industry further contribute to vocational training by creating trainee posts for vocational practice training and by participating locally on ROC boards or advisory committees.

Two Ministries are involved in vocational and adult education: the Ministry of Education, Culture and Science and the Ministry of Agriculture, Nature Management and Fisheries. They are responsible for the quality, funding and accessibility of the education system. This responsibility is executed by ultimately legitimising standards and qualifications intended to be government-funded, subsidizing an inspectorate agency and providing lump sum subsidies for *ROC's* and *AOC's*.

4.2 Methodologies and procedures for updating standards and qualifications

The very first step for most *LOB's* will be the analysis of occupations for the development of occupational profiles. A great number of tools and methods can be used for the development of occupational profiles:

- sector surveys analysing all, or at least a great number of profiles at different levels;
- Delphi methods;
- conferences;
- monitoring procedures, analysing the sectors' trends and innovations;
- curricula of traditional VET programmes (!).

Before translating occupational profiles into standards and qualifications, they are validated by the sector's social partners. In most cases in this validating process the allocation of that occupation to a level is settled.

One of a number of occupational profiles can make up a qualification, its units being defined in terms of coherent sets of occupational activities. As occupations are defined in occupational activities, units are in fact sets of activities. The first step in 'translating' an occupational profile into a vocational profile, or qualification, is in fact no more that selecting the activities out of the occupational profiles that will be regarded as potential vocational standards. The next steps in this translation process boil down to rephrasing occupational standards into vocational standards; the identification of skill, attitudes and underpinning knowledge needed to perform an occupational activity. Representatives of the *ROC's*, united in a BTG (*Bedrijfstakgroep;* representatives of all *ROC's* providing education for a specific sector) and the social partners (LOB), are responsible for this translation process.

Qualifications must be approved by ACOA for registering in the CREBO register. Therefore new qualifications will be presented to ACOA. It is ACOA's task to bring out an advise to the Minister of Education whether or not to legitimise the qualification. Only when a qualification is approved by the Minister it will be registered in CREBO.

5. Similarities and differences between the Dutch framework and the European five-level structure

As stated before the level definitions applied in the 1985 EU level framework, next to other relevant systems were studied. Although the European framework was taken as a reference document, however, the content and characteristics of definitions retained are not really

permitting the establishment of a direct relationship between the European and the Dutch qualification framework. In the definitive proposal the following reference is made, "...And as a result is linked to the European SEDOC-classification international mobility is stimulated. The diplomas are simpler to compare and easier to exchange...." ([33]). Closer inspection reveals this reference, in terms of level descriptors, is not substantial. In this perspective it is amazing that in the Netherlands it is often claimed that the Dutch system was copied from the European five-level framework. See for instance the explanatory memorandum of the *WEB*: "The new qualification framework has also been designed to conform to the international qualification framework called SEDOC" and "From 1 August 1997, vocational education will be made up of programmes at four qualification levels. These levels are in line with the European SEDOC framework".

EUROPEAN FIVE-LEVEL SYSTEM	DUTCH QUALIFICATION STRUCTURE
LEVEL 1 **Training giving entry to this level: compulsory education and pre-vocational training** This training is followed either in an educational establishment, or within the framework of extra-curricular training programmes, or in a company. The amount of theoretical knowledge and practical skill required is very limited. This qualification *which* is intended for carrying out fairly straightforward work can be obtained fairly readily.	**LEVEL 1** **Assistant** The worker is responsible for the execution of his own work. The work consists primarily of the application of automated routines and only to a limited extent the application of standard procedures. It involves job-related skills and knowledge.
LEVEL 2 **Training which gives entry to this level: compulsory education and vocational training, including dual training/ apprenticeship schemes.** At this level, a *full qualification* is obtained for a clearly defined activity, using the instruments and techniques concerned. This activity consists largely of *practical work, which can be carried out independently* within the boundaries of techniques learned.	**LEVEL 2** **Basic level** The worker is responsible for the execution of his own work. In addition there is a collective, co-operative responsibility in the work whereby co-operation with colleagues takes place. The work consists of applying automated routines and standard procedures. It involves occupation-related skills and knowledge.

([33]) Ministerie van OC&W, Wet Educatie en Beroepsonderwijs; De Wet in hoofdlijnen, Zoetermeer, 1996, page 14

LEVEL 3 **Training which gives entry to this level: compulsory education and/or vocational training and additional technical training or technical vocational training or other vocational training at secondary level.** This level implies *more theoretical knowledge* than the previous level. This level comprises mostly practical work, which can be carried out independently and/or comprises other responsibilities such as *leadership and coordination.*	**LEVEL 3** **All round** The worker is responsible for the execution of his own work and must also account for his actions towards colleagues (non-hierarchical). In addition he bears explicit and hierarchical responsibility: monitoring and supervising automated routines and standard procedures. The work comprises standard procedures and combining standard procedures. In addition he combines or devises procedures, in the light of work preparation and supervisory activities. It involves for the most part occupational skills and knowledge.
LEVEL 4 **Training giving entry to this level: secondary vocational education (general or vocational) and post-secondary training.** This is *technical training at a higher level* in educational establishments or elsewhere. The qualification which is obtained as a result of this training comprises knowledge and skills at a higher level, but in general terms does not require knowledge of scientific principles in the different areas concerned. These skills and knowledge make it possible in particular to *take responsibility for planning and/or supervision and/or management* in an autonomous or independent way.	**LEVEL 4** **Middle management** The worker is responsible for the execution of his own work and must also account for his actions towards colleagues (non-hierarchical). In addition he bears explicit hierarchical responsibility; this responsibility concerns planning and/or administration and/or management and/or development of the whole production cycle. Furthermore he combines or devises new procedures. It involves specialist skills and knowledge and/or occupation-independent skills and knowledge.
LEVEL 5 **Training which gives entry to this level: secondary education (general of vocational) and full higher education.** Who-ever has followed this training is able to carry out an occupational activity as a salaried or *self-employed* worker and *has a thorough command of the scientific background* of the occupation. The qualifications required for carrying out an occupational activity can be integrated at these various levels.	**LEVEL 5** **Professional** The professional is responsible for his work and must account for his actions towards colleagues (non-hierarchical). Work can involve both, the application and combining/devising of a limited set of complex standard procedures (specialisations). Work might also include application, combining and devising standard procedures for a range of activities (breadth). The professional bears explicit hierarchical responsibility; this does not involve responsibility in an executive sense like monitoring and supervision, but responsibility in a formal, organisational sense. Work involves specialised, supra-occupational skills and knowledge. The emphasis is on devising new procedures, tactical and strategic actions and skills with regard to development and execution of policy.

When the European Council of Ministers introduced regulations concerning the free movement of employees within the European Community in 'Regulation 1612/68(EEG)',

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SEDOC was introduced for *harmonising the offers and requests for work with each other, whereby initially the accent was placed on giving information on Employment Offices' services, but also of employers and employees, concerning the opportunities for employment in the member states and the workforce available in the European Community.*

SEDOC should enable Employment Offices to allocate occupations, personal sets of occupational experiences and diplomas to a European level, overcoming the difficulties, which arise as a result of the diverging national nomenclature and the use of different languages and terminologies. For implementing the Council decision on the comparability of qualifications from 1985 the SEDOC job descriptions have been used for terminology purposes, SEDOC was never intended to indicate levels in (training) qualifications. In the meantime, SEDOC has been replaced by EURES, which, however, has a similar set-up, namely to compare offer and demand of jobs and assist labour and employers in finding adequate jobs or to fill job vacancies.

This and other qualification frameworks may have three objectives:

- a classification can be used as 'working tool' for the benefit of **labour mobility and mediation;** for this the SEDOC/EURES is used;
- a classification can be used as a **'statistical'** tool for **comparing educational systems and their outputs,** for this purpose the ISCED is used;
- a classification can be used as tool for **rating certificates and diplomas.**

If we take the assumption that the work organisation and real job hierarchies are the main basis for distinguishing levels in vocational education and training qualifications, we have to conclude that neither SEDOC, EURES nor even ISCED are adequate. In short, none of these frameworks is an ideal tool for comparing vocational qualifications based on that assumption.

The first two are only referring to employment in certain jobs without specifying any level and the second is only referring to educational/training levels without including aspects of the work organisation and job hierarchy in given branches or occupational fields.

6. Case studies

6.1 Development of standards in the health and care sector

6.1.1 Description of the procedure

Between 1970 and 1990 a number of efforts were made to merge a great variety of education and training pathways in heath and care into a coherent infrastructure. These twenty years of discussion and experimenting did not result in a coherent system of training and education though. After twenty years of discussion, the inheritance of top-down policy still resembled a patchwork of non-corresponding curricula with digressive and particularly time-consuming processes needed to change curricula. There were still great differences between administrative, legal and financial frameworks. One of the major reasons for this stagnation was the division of responsibilities for vocational education for the health and care sector between the department of education and science (OC&W) and the department for public health (WVC); school-based vocational education was funded by the Ministry of Education, dual vocational education or in-service education was funded by the Ministry for Public Health. In fact, both education systems were competing, for they prepared for the same type of occupations. This so-called 'two tracks policy', the full time education track and the 'in-service' track, lasted till 1996. In that year an agreement was signed in which 'in-service' education moved to the Ministry of Education and Science.

In the meantime a high profile Committee, *Commissie Kwalificatiestructuur,* produced a coherent and representative qualification framework, covering five levels. In contrast to other sectors the Health and Care qualification framework was not the result of an empirical survey producing a number of occupational profiles, organised by the sector's National Body. It was felt a broadly composed Committee with representatives from all employer organisations, trade unions, professional bodies, the national body and representatives from secondary vocational and higher professional organisations should be responsible for the development of such a framework. Only the proposals from a broadly composed committee would arouse maximum support. The new qualifications should represent the actual occupational infrastructure and be instrumental for care renewal and the innovation of education.

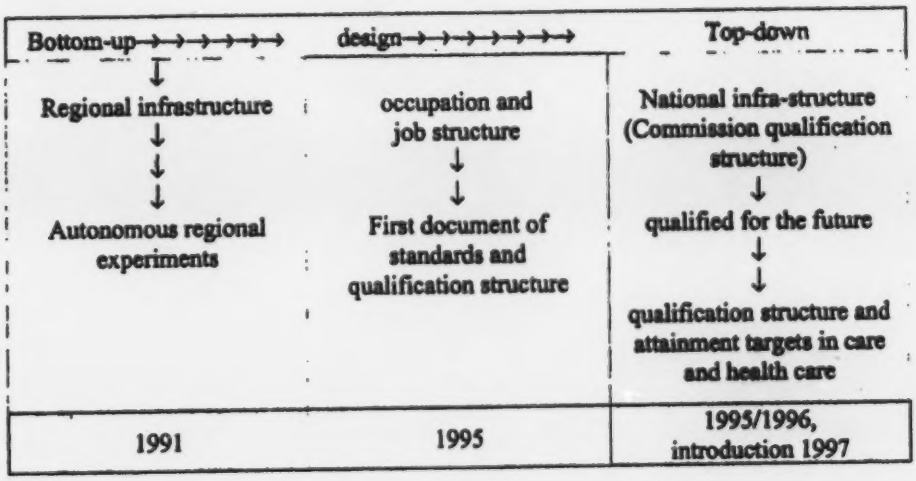
In fact, the committee could base it's work on regional experiments, which started in 1991. The experiments were expected to produce coherent educational infrastructures in six regions. By having all regional stakeholders involved in this bottom-op approach, both ministries hoped that those regional experiments would overcome the deadlock and fruitless discussions at the national level.

6.1.2 People involved

The procedure was unusual in two points: (i) the committees' work covered five levels, higher professional education included, instead of the four levels identified in secondary vocational education; (ii) all relevant stakeholders from the sector and education were involved in the development of the qualification framework, and not only the social partners represented in the National Body. In total 15 sector and education representatives, an independent chairman and 4 experts. Surprisingly the committee was initiated by the two relevant Ministries: the Ministry of Education and Science and the Ministry of Health, Care and Sports. This can be explained by the fact that, taking the rather problematic education history into account, both Ministries wanted to solve this problem once and for all. The new framework should be a major corner stone and expression of a coherent education infrastructure.

6.1.3 Time span

In fact the time span, in which the recent qualification structure was developed, lasted from 1991 (the regional experiments) till 1997 (when the new qualification framework was implemented):



6.1.4. Aids and appliances, resources and instruments

The most important data came from the regional experiments. The data from these experiments and the results of conferences with various groups of professional workers formed the foundation of the new qualification structure.

6.1.5. Procedure(s) for the validation of standards

The foundation for the new qualification framework and the standards was formed by:

- the definition of the core activities of an occupation or of a group of occupations, expressed in so-called 'core' activities;
- the identification of additional activities, who, as a rule, are part of the work in an occupation;
- the allocation of the occupational profiles to levels, expressed in terms of by the measure of responsibility, complexity and transfer (*Verantwoordelijkheid, Complexiteit* and *Transfer, the so-called VCT-score*).

Application of the VCT-score produced this classification:

Level 1 No qualifications identified at this level, because occupations at this level don't exist in the health and care sector, according to the sector's employee- and employer's organisations.

Level 2 At this level the assistant aid (*helpende*) is identified; domestic and personal service.

Level 3 Qualifications at this level are labelled as care-taker (*verzorgende*); personal and social care for various types of sick and handicapped people.

Level 4 Qualifications at this level are labelled as nurses (*verpleegkundige*); nursing in various settings.

Level 5 Nurses (higher education) in health care (*verpleegkundige*); additional to nurses at level 4, nurses at level 5 are also responsible for work planning and coordination.

6.1.6 The assessment of the procedures by people directly involved

It is difficult to find any documentation on the workability of the development process and the classification criteria. The fact that the committee's work was successful and resulted in a major innovation of the qualification framework might be regarded that the procedures were effective.

Negotiated compromise

Some marginal comments can be made on the combined process of regional 'bottom-up' experiments, the groundwork for the new framework, and the 'top-down' decision-making on the new qualification framework.

In the progress of decision-making, the distance between the 'work-floor' and national interest was growing again. Policy-makers and representatives from interest groups dominated the process. In this process decision-making on the qualification framework could easily become an instrument for the promotion of group interests. Results, being compromises between various interests, can affect the quality of the qualification framework in terms of blurring the communication between qualifications defined at national level and the nature of work as felt by the workers themselves. Communicating the new qualifications to the people at the working-floor should be part of the decision-making process.

Opinion on the quality of the results

The new qualification framework for health and care, together with a new division of responsibilities in the execution of education, provides a firm base, but does not guarantee the quality of health care education. Assessing and improving this quality is in fact the shared responsibility of regional education centres and health and care institutes; the so-called 'users of the qualification framework'.

These users should not only be responsible for their respective tasks in organising education as defined in the qualification framework, they should also be able to use the framework for communication and close cooperation. They should not only be users, but should become owners. This can be realised when the national qualification framework is less detailed and prescriptive and delegates parts of the decision-making process to a regional level. The six regional experiments proved that this regional cooperation is very effective and rewarding.

6.2 The development of standards and qualifications in the construction sector

6.2.1 Description of the procedure

The procedure followed in this sector did not differ from procedures followed in other sectors. In 1992 the sectors' National Body for Building and Construction (*Stichting Vakopleidingen Bouw*, SVB, since 1999 *Bouwradius*) finished a major survey, analysing all occupations at all levels in this sector. The occupational profiles were used as an input for qualification development.

For that all standards were grouped into partial qualifications, or units in the first place. SVB based all partial qualifications on **occupational skills** and **occupational tasks**. The occupational standards of each unit were translated into vocational standards (skills, knowledge and attitudes). Only then the qualifications, expressed in vocational standards were allocated to levels. Each vocational education programme consists of a number of compulsory partial qualifications and a number of non-compulsory partial qualifications, so that a learner can make a selection.

In all the characteristics of occupations were deciding factors in determining the type of standards, the definition of qualifications and the level classification of qualifications in this sector.

6.2.2 People involved

In drawing up the qualification framework for their sector, most National Bodies, including SVB, called upon people from industry, both from sector and umbrella organisations as well as from the Committees for Education and Industry (*Commissies Onderwijs Bedrijfsleven; COB*). In fact the following persons and organisations were involved:

- the department of the SVB, responsible for the development and maintenance of the qualification framework and the standard and qualification documents;
- a great many people working in the sector, people from construction companies, professional organisations, employer- and employee organisations;
- technical support was given by CINOP, COLO, etc.

6.2.3 Time span

Formally the process started December 1993. In fact this was the date of appearance of the 'Format for the Qualification structure'. Occupational profiles were already developed within the *BOOB* framework (see paragraph 1.2). In all the process lasted till January 1996, when *SVB* and *COB* jointly validated the new qualification framework, covering all levels and all qualifications. The whole process lasted little more than two years.

6.2.4 Aids and appliances, resources and instruments

- Documents, according to the people involved:
  - the Vocational Education Act (*WEB*);
  - the *Format* for the qualification framework;
  - a model/prototype of the new standards, produced by *CINOP*.
- Instruments:
  - the taxonomy for learning goals, developed by Romiszowsky;
  - validation Conferences for people from education and the industry.

6.2.5 Procedure(s) for the validation of standards

In fact there was only a problem with level 1, the assistant level. Social partners agreed there should no one be employed at level 1 in this sector. Hence, nobody should be trained and educated for a qualification at that level. *SVB* decided not to include level 1 qualifications in its qualification framework ([34]).

6.2.6 The assessment of the procedures

Workability of the steps and criteria for classification

We will present some of the problems, experienced by the people directly involved in the process. In order of priority, these were:

- the period in which, in this case 27, qualifications had to be developed and to be allocated to levels, was regarded to be too short;
- the criteria for classification were regarded to be too unspecific. Therefore, *SVB* developed own applications to the criteria;
- by strict application of the three criteria (responsibility, complexity and transfer), some qualifications should obtain a too high position: level 4 instead of level 3. In that case the link with some level 2 qualifications should be lost. This lead to much discussion and loss of time according to the people involved. Apparently they were not aware of the fact that they mixed different sets of reference criteria: the wish to have a set of qualifications expressing the hierarchy in occupations and the wish to have a coherent set of qualifications criteria needed for progression routes in the occupational sector;
- each qualification should contain vocational standards, besides the so-called MCK standards (*Maatschappelijke en Culturele Kwalificaties*, Civic and Cultural Qualifications). The *MCK* standards are not produced centrally, neither by thegovernment, nor by any other institute. *LOB's* and *ROC's* have to decide which *MCK's* should be included in the various qualifications. In most cases *MCK*'s are developed in the framework of the overall qualification development process. In this case people involved thought too much time was spent on the production of *MCK's*.

([34]) However, after years of research and discussion the introduction of a level 1 qualification has been proposed. Partly due to the high labour demands in the sector. Level 1 qualifications should enable more people (girls, immigrants, drop outs, people from other target groups) to have a qualified job in the sector.

7. Personal (expert) opinion

7.1 Positive and negative aspects of the classification system

The National Advisory Committee on Vocational Education and the Labour Market (*Advies Commissie Onderwijs Arbeidsmarkt* - ACOA) is responsible for ensuring that the qualification structures of all branches of industry are drawn up in accordance with the Format. Last year the ACOA published an evaluation, quoted in this report. We agree with the conclusions of this report. ACOA commented that the new qualification frameworks of the sectors showed great differences. Some qualification structures still have the character of an education framework. Globally *LOB's* can be divided into two groups: sectors are either focussed to have their framework defined in education terms or in occupation terms. This duality is expressed in three different ways:

- it is demonstrated in the use of classification criteria adopted to subdivide qualifications into partial qualifications or units;
- it is demonstrated in the degree in which a qualification framework is defined independent from learning processes and learning venues;
- it is expressed in the degree traditional funded education programmes were copied in the new qualification framework.

Most National Bodies adopt fairly formal arguments for justifying the levels which qualifications are given. Characteristic of this formal approach is the (practically identical) adoption of the general description of levels from the format qualification structure. In the case of a branch-specific approach, the argument is derived from a general picture of occupational practice and the occupational practitioner within this. Through this the occupation which one wishes to qualify for is substantiated in such a classification.

A further glance at the new qualification framework makes clear that in most cases there is an almost linear connection between the presumed level of the old VET programmes and the designated level of the (new) qualifications. In other words: the old primary, secondary and tertiary apprenticeship training programmes are placed in qualification level 2, 3 and 4 respectively. The tertiary training programmes are primarily classified as specialist training (level 4). The old 4-year MBO courses are nearly all connected with a qualification at level 4. This means that in the development of the qualification structure, the conversion from 'old' to 'new' training programmes available has been the dominant factor. This has been a case of conversion rather than a reorganisation of training programmes across the four levels.

7.2 The potential of the qualifications for the accreditation of prior learning

In 1994 the advisory Committee for Accreditation of Prior Learning (further: APL) concluded that a system for APL in the Netherlands should be desirable. The introduction of such a system was regarded to be feasible. The committee defined APL as an assessment process and defines the term as follows: *"A process in which an individual's knowledge, skills and attitudes (competencies) are measured against standards which are derived from the existing qualification structure"*.

According to the committee the introduction of APL via assessment, independent from an educational route will be more effective if the closest possible alignment is reached with already existing infrastructures. In the first place, this means that the procedures remain within the parameters of the Adult Educational and Vocational Education Act (*WEB*) and that alignment is also reached with the national qualification framework for vocational education. Furthermore, existing expertise within Regional Education Centres (*ROC's*) and National Bodies for Vocational Education (*LOB's*) will be better utilised.

In 2000 the qualification framework for secondary vocational education is used for APL. Experiences show output and occupation based qualifications are a prior condition for APL. As we have seen the *Format* presupposes this type of qualifications. The way National Bodies implemented the new *Format* on this point varies however. Qualifications have to be defined in standards, presenting all skills and attitudes to be found in an occupation. This type of standard can be used for the validation and recognition of qualifications obtained elsewhere, through experience for example. Therefore, the so-called 'conditional objectives', or subject-based or academic standards are not supposed to be part of a qualification. Some National Bodies have however put this type of standards in their qualifications, showing their inclination to think primarily in terms of education and much less in terms of education-independent qualifications.

We can conclude that the level's classification, and it's implementation have to be improved on a number of points:

- standard definitions should not waver between two implicit concepts: mixing up an education based approach and an occupation based approach in a rather incongruent way;
- terminology and definitions should be user friendly;
- the rules to be applied must be clearer and better supervised.

In fact level classification should take into account:

a. more counter balancing power in the level allocation procedures if the system claims qualifications from various sectors at one single level have a comparable weight in terms of complexity, responsibility and transfer. The current procedures only take the inter-sector

rationale of level allocation into account, risking the balance and representativity of the national framework;

b. complexity, responsibility and transfer could remain the essential criteria of the level classification system. Complexity as a function of being able to handle a range of tasks - rather than the complexity of individual tasks. In fact complexity should be the most important criterion;

c. responsibility and transfer should be regarded as control variables. Responsibility overlaps complexity to a certain extend. It can be expected that in a lot of cases increasing complexity of occupational tasks can be linked to increasing responsibilities. Exceptions to this rule need careful attention. This is also the case with respect to transfer. Increasing complexity/responsibility will demand more skills, knowledge and/or command in a broader range of job responsibilities. In this sense, transfer cannot be described in terms of job/occupation-specific versus occupation-independent, but in terms of breadth; a greater variety of knowledge and skill implies a wider range of job responsibilities.

References

ACOA, 1996: *De ontwikkeling van de kwalificatiestructuur voor het secundaire beroepsonderwijs: een tussenstand (discussienota)*, ACOA

ACOA, 1997: *Verder aan het werk met de WEB, de ontwikkeling van de kwalificatiestructuur voor secundair beroepsonderwijs* , ACOA

Blokhuis, F., van Zolingen, S., 1997: *De kern te pakken: sleutelkwalificaties, kernproblemen en de landelijke kwalificatiestructuur*, CINOP/ Universiteit Twente

Blokhuis, F., R. Klarus, 1997: *Accreditation of Prior Learning in the Netherlands* , CINOP

CBS, 1999: *Standaard onderwijsindeling*, editie 1998/1999, CBS

Commissie Herijking Kwalificatiestructuur, 1995, *Kwalificatiestructuur secundair beroeps-onderwijs: advies van de commissie herijking kwalificatiestructuur*

ISCED, 1997: *International Standard Classification of Education* , UNESCO

Ministerie OC&W, 1994: *Format kwalificatiestructuur, het indelingsschema van de kwalificatiestructuur secundair beroepsonderwijs*

Ministerie OC&W, 1996: *WEB, de wet educatie beroepsonderwijs, de kwalificatiestructuur beroepsonderwijs*

Ministerie van OC&W en Ministerie van VWS, 1996: *Gekwalificeerd voor de toekomst*

Ministerie OC&W, HOOP, 1997: *Ontwerp Hoger Onderwijs en Onderzoek Plan 1998*

Ministerie van OC&W, 1999: *Ontwerp Hoger Onderwijs en Onderzoek Plan 2000*

Mechelen, R.P.M. van, 1997: *Vergelijkend onderzoek eindtermen, vestigingskwalificaties en WEB-kwalificaties, eindrapportage BVE raad*, CINOP

Meteren, J. van, 1998: *Kwalificatiestructuur en infrastructuur, casus verzorging en verpleging*, in: Jaarboek Kwalificatiestructuur, CINOP

Nafzger, J., 1997: *Reconstructie Format voor kwalificatiestructuren* , CINOP

Swager, R., 1995/1996: *Getuigen van niveau, de niveauclassificatie verduidelijkt* , CIBB(CINOP)

Vereniging van Hogescholen, 1995: *Niet meer maar beter, verslag van de commissie referentiekader onderwijsaanbod*

Visser, K., Blokhuis, F., Klarus, R., (eds.), 1998: *Jaarboek kwalificatiestructuur*, CINOP

Visser, K., 1992: *Beroepsonderwijs en scholing in Nederland*, CIBB

Visser, K., 1992: *Systems and procedures of certification of qualifications in the Netherlands*, CIBB

Annex 1: Overview of the national bodies

BOUWRADIUS
Foundation for Vocational Education in the Construction Industry

ECABO
National Institute for the advancement of vocational training in the field of administrative commerce, administrative automatisation, logistics, social law and security

GOC
Institute for the Labour Market and Education of the Graphic and Communication Industries

INNOVAM:
Training and Examination Centre for the automobile sector

Intechnium
Innovation and Education Centre for Installation Technology

Kennis en OpleidingsCentrum Handel
Training Centre for the Wholesale and Distribution Sector

KOC NEDERLAND
Hairdressing Training Board

LOBAS
The National Organisation for Vocational Training in the Agro Food Sector

Opleidingscentrum SVS
Centre for Vocational Training for Painters and Plasterers & Design and Representation Techniques

OVDB
National Body for the sector Health Care, Facility Service, Welfare and Sport

SH&M
The Foundation for Wood and Furniture: Training Centre for the Wood Trade and Manufacturing, Furniture and Carpentry Industry and Furnishing Sector

SOBB
The Foundation for Training in the Bread and Confectionary Sector

SOM
National Institute for Training Courses in the Metal Industry

SVGB
Foundation for Professional Training in Health Care Technology

SVH Onderwijscentrum
Education Centre for the Hotel, Restaurant and Catering Industry

SBW
Foundation for Vocational Training in Civil and Maritime Engineering

SVO
The Dutch College for the Meat Trade

Vakopleiding Transport en Logistiek
Transport and Logistics Training Board

VaPro
National Institute for Vocational Training and Education in the processing industry and laboratories

VEV
National institute for electro-technical vocational training and qualification

VOC
Vocational Training Institute in the Vehicle Building and Body Repair Industry

VOC/BETEX
The Education Centre for the Textile and Clothing Industry

V. United Kingdom

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1. History of the national classification system

To 1985 no national classifications of vocational qualifications.

Key issues: qualifications designed and operated by a wide range of bodies, some areas having very good linkages between an awarding body, professional bodies and employers in the sectors, other having poor linkage.

In 1984 Youth Certification Board set up by the Training Agency, with the remit of identifying competence-based qualifications which could be used to certificate unemployed young people (16-18 years of age) on work-based learning programmes (YTS/YT schemes) of one year duration.

Key issues: Found few qualifications could be used for accrediting learning in the workplace, with large numbers of occupational areas without any suitable qualifications.

In 1985 Review of Vocational Qualifications - a special group set up by Government to examine processes for introducing greater coherence into vocational qualifications. Recommended implementation of policy to ensure that all occupations were covered by suitable qualifications; that overlap and duplication be removed from the system; and that all qualifications met national criteria. Three main policy mechanisms were recommended:

1. **Criteria for national vocational qualifications:**
   these stated that qualifications should: be expressed in the form of units; be competence-based; outcome-oriented; and assessed principally through observation of performance. The criteria were progressively refined by NCVQ (see below) from 1986 to 1997, with initial versions tightly specifying the form of the qualifications. National Vocational Qualifications (NVQs) would be based on standards, developed through analysis of occupational competence in an area (the principal technique for this being 'functional analysis');

2. **A five level framework:**
   initially specified at four levels, covering basic skilled labour to higher technical levels, Government in 1987 extended the framework to include a fifth level, equating to higher professional performance;

3. **Occupational classification of 11 occupational areas:**
   this was a new classification which drew on but did not match exactly existing ILO, OECD and UK Government classifications.

Key issues: national vocational qualifications were introduced alongside a very wide range of existing qualifications. Impact and take-up has developed slowly (after ten years are only now approximately 50 % of the total qualifications awarded each year), and uneven across levels and sectors.

In 1986 the National Council for Vocational Qualifications (NCVQ) was formed, responsible for implementing the recommendations of the RVQ.

Key issues: NCVQ was required to be self-funding after five years of its life (through fees paid to them by bodies awarding NVQs); this requirement was subsequently abandoned after the distorting effects on its implementation work became particularly obvious. In 1992, NCVQ saw the importance of introducing general education qualifications with a vocational focus which would enjoy parity of esteem with general academic qualifications, and thus designed and implemented General National Vocational Qualifications (GNVQs).

In 1997: following the recommendations of Lord Dearing, the first national framework incorporating both academic and vocational segments of the system was developed. The report included recommendation that a single body responsible for the national curriculum (for schools) and for the national framework of qualifications be formed - the Qualifications and Curriculum Authority (QCA). This which was created from merger of the previous schools body (the Schools Curriculum and Assessment Authority - responsible for regulating the national curriculum and its assessment, and general academic qualifications) and the previous body responsible for national vocational qualifications (NCVQ).

Key issues: the system now displays increasing tendencies towards rationalisation (with reducing numbers of qualifications), towards modular/unitised qualifications, and alignment in the form of academic and vocational qualifications. In the vocational area, policy attention has switched from specifying in detail the form of national vocational qualifications to regulating the national standards on which the qualifications are based. Although switching to a more inclusive model, there still exist a significant number of qualifications outside the national framework.

1.1 Aspects of the earlier system which are included in the current system

The framework of levels and the criteria for National Vocational Qualifications was a radical break from the previous traditional of vocational qualifications. The system was intended to be:

- **comprehensive:**
  filling significant gaps in the qualifications system; in terms of specific sectors and levels. The underlying intention was to use revision of the qualifications system to reverse the decline and unevenness of skills development in the economy - a concern stimulated by rising youth and adult unemployment, and a stagnation in the level of training, marked particularly by a steady reduction in apprenticeships;

- **competence-based:**
  previous high-quality vocational training (apprenticeships) had become dominated by time-

serving. The NVQ system was designed to be based on the requirements of work, with the qualifications not being tied to any mode, type, duration or location of learning.

The formation in 1986 of the NCVQ, responsible for the implementation of the national framework of levels and NVQs, was a result of the recommendations to Government of the 1985 Review of Vocational Qualifications. This undertook a wide ranging consultation with industry interests (employer organisations, sector organisations, employers, social partners) and vocational training and education interests (awarding bodies, educationalists, educational representative bodies).

The RVQ, and the NCVQ following it took care to ensure that the system was employment-driven, in order to preserve the commitment to occupational competence at the heart of the model.

However, as outlined above, the English system is defined by its heterogeneous character. New systems tend to be overlaid on existing systems, giving rise to diverse and complex arrangements, with vestiges or significant aspects of previous systems existing alongside, and in many cases existing in competition and tension, with new systems. Thus, although introduced in 1986 as a means of rationalising the vocational qualifications system, the NVQ framework is not dominant in the system. Considerable numbers of non-NVQ qualifications continue to exist (NVQs forming approximately 50 % of the vocational qualifications awarded - and the proportion is set to decline slightly from this time) and considerable numbers of qualifications continue to exist outside the national framework.

2. Definitions of standards

It must be recognised that while National Standards and NVQs based on them are the main instrument for Government policy directed at rationalising the national system of qualifications, at the current time, it is estimated that NVQs account for approximately 50 % of the total number of vocational qualifications awarded in England. The anticipated trend is towards a slight decline in NVQs as a proportion of the awards. Therefore, there remain active many qualifications which are neither NVQs nor based on National Standards. These 'other' VQs (vocational qualifications) assume many different forms and are offered by a wide range of awarding bodies. This paper will not deal with non-NVQ VQs; since they exist in a very wide range of forms, some unit-based, others not; some outcomes-based, others not; etc. The paper will focus on the model for NVQs and national standards.

It is essential to recognise that NVQs and national standards on which they are based are intended to describe occupational competence, not competence in a specific job role in a particular location. In particular, they do not describe the way in which tasks are completed by a specific individual. The generalised descriptions which the focus on occupational competence gives rise to thus have to be related by the assessor and the candidate to the specifics of a job or tasks undertaken in a specific setting in an enterprise.

The NVQ model for qualifications (developed in 1986-8) was precise and somewhat rigid:

1. Qualifications had to be expressed in the form of units (typically 8 to 12 units making up a qualification).

2. The qualification was designated as being at a particular level, not the units; a given unit could appear in more than one qualification and at more than one level.

Each unit had to be expressed in the form of:

1. An element (a description of the area of competence; a units typically would include between 3 and 8 elements).

2. Performance criteria (describing the outcomes on which a judgement of competence can be made).

3. Range (describing the different aspects, contexts, etc. wherein competence should be demonstrated).

4. Evidence requirements (stating the type of evidence which should be used as the basis of the assessment of competence).

From the mid-90s, criticism of this model led to the addition of:

5. underpinning knowledge/knowledge requirements (listing the knowledge, principles, theory etc. related to the area of competence described in the element).

However, with the rigidity of this model increasing being cited as the reason why awarding bodies and employer organisations were reluctant to develop and use NVQs, the requirement to follow this structure has been reduced. The emphasis is now on NVQs aligning with the national standards rather than all being expressed in the same form. It has always been possible for different awarding bodies to offer the same NVQ or variants with slightly different configurations of units. This move to regulate the system principally through the underpinning national standards of competence decreases the pressure for NVQs to be expressed in exactly the same form, and increases the tendency towards diversity in the system.

2.1 The elements of standards: state of the art, relevance for the future

In focusing on occupational competence, the descriptions of competence in NVQs do possess tensions between:

1. The requirements of specific jobs ↔ the broader requirements of the occupation.
2. Current requirements of the occupation ↔ future requirements of the occupation.
3. Enterprises at the leading edge ↔ enterprises using older models and technology.

It is essential to remember that NVQs are concerned with outcomes, rather than with specified training programmes. The original intention was that not only would the descriptions in the qualifications be based on the actual requirements of workplace activities, but that the qualifications could be obtained through assessment of workplace activities as they currently exist. The obvious tension which is then created between assessing in a specific workplace (job competence) and requiring broader competence, including preparation for future work requirements (occupational competence) have been resolved by different people in different ways.

Firstly, in some qualifications, awarding bodies and related professional organisations have adopted a 'core plus options' approach, where a core of units maps reasonably onto current requirements, and additional optional units are used to (i) tailor more closely to the specific context of the candidate; (ii) broaden the candidates' competence beyond their current contexts; (iii) prepare for, or adapt to, new requirements. The candidates obtain a complete

NVQ when they have met the requirements of the core units and a certain number of optional units - in some cases, certain configurations of optional units are required, or certain combinations excluded.

Secondly, it is certainly the case that the use of units rather than complete qualifications has increased. This is indicated by evaluation studies and through an increase in the number of candidates working towards units, but a plateau in the number of full NVQ certificates being awarded.

Thirdly, the breadth of the NVQ units is cited by some employers as a problem rather than as a benefit, since it requires that a candidate do more than their current job in order to obtain certification. Some employers do respond with job rotation, on-job training, off-job training etc. However, in many cases the response is to interpret the generalised descriptors in the units into the specifics of current jobs, and in the process narrowing the description of competence. This variability in the interpretation of NVQs during the assessment process - pushing the award from occupational competence to job competence - may be adversely affecting the currency of NVQs in the labour market.

2.2 The types of standards which are used

The national standards which form the reference point for NVQs are developed principally through analysis of workplace activities (see section 6), although in some occupational sectors (e.g. health care) secondary analysis (e.g. by occupational psychologists; work process analysts; etc.). The standards then are verified through extensive consultations in the occupational sector to which they relate, this consultation including relevant representative organisations, social partners, employers, trainers and training organisations and relevant workers (e.g. NVQ assessors). The precise pattern and processes of the consultations are not laid down, and the balance of representation changes from sector to sector, and from NVQ to NVQ.

With the focus on occupational competence, the national standards are more oriented towards industry standards, but are derived through analysis of enterprise standards. The principal requirement is that the standards should relate to competence rather than simply express the requirements of training or vocational education programmes.

2.3 Avoidance of bias

The *Criteria for NVQs* states that those developing and operating the qualifications should ensure that the qualifications specifications and the administrative systems for the qualifications avoid stereotyping and bias (for example that relating to ethnicity, gender).

The specifications for the consultations associated with the development of national standards

and NVQs state that the consultations should included all relevant interests, and this is checked by QCA in regulating the qualifications.

Bias can enter in both insidious and explicit ways in all parts of the development of and operation of the qualification:

Development phase:

- the definition of competence;
- the analysis of competence in the workplace;
- the consultation used to develop the standards and qualifications;
- the description of the standards and the unit descriptors.

- **Operational phase:**

- the systems for giving candidates access to qualifications (including funding);
- the culture of learning in the workplace or other settings;
- the assessment process;
- cultural biases present in work and society (e.g. perceptions of 'gendered work');
- use of the qualifications in selection.

The QCA not only checks the qualifications against criteria in order to sanction them for use in publicly-funded programmes, it also monitors the operation of the qualifications. Here, statistical monitoring is becoming increasingly significant and refined. Recently, attention has in addition been paid to the definition of occupational competence and the way in which this may include insidious bias (Oates T, 1999).

3. The classification system

3.1 The classification system: definition and components

The NVQ 5-level framework for vocational qualifications:

Level	Description of standard
I	Occupational competence in performing a range of tasks under supervision.
II	Occupational competence in performing a wider, more demanding range of tasks with limited supervision.
III	Occupational competence required for satisfactory, responsible performance in a defined occupation or range of jobs.
IV	Competence to design and specify defined tasks, products or processes and to accept responsibility for the work of others.
Level V	Should reflect competence at professional level with mastery of a range of relevant knowledge and the ability to apply it at a higher level than IV.

3.2 The criteria for allocating qualifications (not standards) to levels

The allocation of qualifications to levels is undertaken by the submitting awarding body. They must make clear to QCA to which level in the framework a specific qualification relates, and provide a justification for this. QCA checks the submission and will negotiate with the awarding body if the QCA considers that the justification is inaccurate, inappropriate or incomplete.

The development and implementation framework for national standards and for NVQs follows this pattern:

National standards in a given area are developed by a designated National Training Organisation (NTO), often commissioning expert standards developers. The draft standards are widely consulted upon before being approved by government agencies - previously this was the responsibility of the DfEE, now passing to QCA working in conjunction with the DfEE.

NVQs are then developed by one or more awarding bodies working in conjunction with a NTO. An NVQ must be based on the national standards; this is now more significant than the qualification following the exact form of the units developed during the late 80's and early

90's, at the outset of the implementation of the NVQ system. However, the qualifications must be expressed in the form of units, and must be available on a national basis. As part of the submission and approval process, QCA checks whether the quality assurance systems and administration systems for the qualification meets laid down criteria, including those relating to equal opportunities. More than one awarding body may work with an NTO in order to deliver the same, or broadly similar NVQs. Likewise, an NTO may work with more than one awarding body in order to develop complementary NVQs covering different areas and/or levels of the national framework. A few NTOs are also awarding bodies, although this is a proximal relationship which QCA and the DfEE does not encourage.

3.3 NVQ levels framework

Level	Description of standard
I	Occupational competence in performing a range of tasks under supervision.
II	Occupational competence in performing a wider, more demanding range of tasks with limited supervision.
III	Occupational competence required for satisfactory, responsible performance in a defined occupation or range of jobs.
IV	Competence to design and specify defined tasks, products or processes and to accept responsibility for the work of others.
Level V	Should reflect competence at professional level with mastery of a range of relevant knowledge and the ability to apply it at a higher level than IV.

3.4 NVQ occupational classification

1. Tending Animals, Plants and Land.
2. Extracting and Providing Natural Resources.
3. Constructing.
4. Engineering.
5. Manufacturing.
6. Transporting.
7. Providing Goods and Services.
8. Providing Health, Social and Protective Services.
9. Providing Business Services.

10. Communicating.

11. Developing and Extending Knowledge and Skill.

3.5 National Framework of Qualifications – the NQF (after Dearing)

As outlined in section 4, while the different awarding bodies are encouraged to submit their qualifications to the QCA for approval for inclusion in the National Framework of Qualifications (NQF), the bodies continue to work with frameworks which relate to their own sets of qualifications. Two of the largest awarding bodies' frameworks are included here – Edexcel and CGLI.

The NQF was designed in 1998-9, following Sir Ron *Dearing's Review of Vocational Qualifications for 16-19 Year Olds*, and comprises the following structure.

The NQF is the latest instrument seeking to rationalise the relationships between qualifications and provide quality assurance mechanism. In providing five levels, it bears a superficial resemblance to the NVQ framework (1986). But while the NVQ framework (1986) attempted to provide a five-level framework for all vocational qualifications, the NQF goes beyond this to provide a three-category, five-level framework for all classes of qualifications:

level of qualification	general	vocationally-related	occupational
5	higher level qualifications (see note)		level 5 NVQ
4			level 4 NVQ
3 advanced level	A level	vocational A-level (advanced GNVQ)	level 3 NVQ
2 intermediate level	GCSE grade A*-C	Intermediate GNVQ	level 2 NVQ
1 foundation level	GCSE grade D-G	Foundation GNVQ	level 1 NVQ
entry level	certificate of (educational) achievement		

note: responsibility shared with the Quality Assurance Agency (QAA) for higher education

There are a number of key issues:

1

unlike many other frameworks - such as the OECD ISCED system, and the EU Cedefop system - the NQF does not use specific descriptors for each level, i.e. descriptors which give the common and/or salient features of qualifications at a given level. The criteria for certain central qualifications in the framework (NVQs, GNVQs, AS/A2, GCSE) give the essential characteristics of each of the separate qualifications, but there are no common descriptors which define levels across the whole system.

2

the NQF is the major policy effort devoted to revision of post-16 education and training - it can be contrasted with the most prominent Government programmes in the pre-16 segment of the system, which engage directly with the quality of the learning experience, giving rise to tangible changes in practice (for example, the literacy strategy in primary schools).

the diagram given in QCA (Qualifications and Curriculum Authority) and DfEE (Department for Education and Employment) documents (as above) mentions only those qualifications which form the main 'Government-preferred' qualifications - such as NVQs and GNVQs. It is essential to note that the accreditation process is designed to admit qualifications other than these - such as non-NVQ vocational qualifications, where they meet a clearly identified need in society and/or the labour market.

3.6 EDEXCEL framework

Edexcel's qualification framework

<table>
<tr><td rowspan="2">Postgraduate & profcasional*

degree*

*not offered by edexcel</td><td>Capability
Key Skills
Award</td><td colspan="2" rowspan="2"></td><td>BTEC Professional Development Diploma</td><td>NVQ Level 5</td></tr>
<tr><td>Capability
Key Skills
Award</td><td>BTEC Higher National Certificate/ Diploma</td><td>BTEC Professional Development Certificate</td><td>NVQ level 4</td></tr>
<tr><td>A level
AS qualification</td><td>Advanced Key Skills Award</td><td>Advanced GNVQ</td><td>BTEC National Certificate/ Diploma</td><td>BTEC Professional Development Award</td><td>NVQ Level 3</td></tr>
<tr><td rowspan="2">GCSE A*-C</td><td rowspan="2">Intermediate Key Skills Award</td><td>Intermediate GNVQ</td><td rowspan="2">BTEC First Certificate/ Diploma</td><td rowspan="2"></td><td rowspan="2">NVQ Level 2</td></tr>
<tr><td>Part One</td></tr>
<tr><td rowspan="2">GCSE D-G</td><td rowspan="2">Foundation Key Skills Award</td><td>Foundation GNVQ</td><td colspan="2" rowspan="2"></td><td rowspan="2">NVQ Level 1</td></tr>
<tr><td>Part One</td></tr>
<tr><td></td><td>Entry Key Skills Award</td><td colspan="4"></td></tr>
</table>

3.7 City & Guilds of London framework

Progressive pattern of City & Guilds awards and comparison with academic and other vocational qualifications.

City & Guilds Level	Qualification/scheme	Comparability
7	Fellowship (FCGI)	
6	Membership (MCGI)	
5	Graduateship (GCGI) Associateship (ACGI) NVQ5	First Degree
4	Licentiateship (LCGI) NVQ4 Career extension Full technological Certificate (FTC)	BTEC HND/HNC Master craftsman (Europe)
3	NVQ3 Advanced GNVQ Advanced Craft Certificate technological Baccalaureate	BTEC National Cert or Diploma 2 A levels
2	NVQ2 Intermediate GNVQ Part 2 Craft Certificate Vocational (non NVQ) level 2	BTEC First Cert 4-5 GCSEs at grades A-C
1	NVQ1 Foundation GNVQ Part 1 Craft Certificate Vocational (non NVQ) level 1	4-5 GCSEs at grades D or below

Source: CGLI 1998

4. Scope and binding

Government policy focused on the qualifications included in the national framework outlined in 3 above. However, as emphasised earlier, while all NVQs (870 in Jan 2000) and approx. 1700 non-nvq vocational/occupational qualifications are included in the national framework, there remains a substantial number of qualifications which have not and may not be submitted for inclusion in the framework – those outside the framework principally are those used in

industry settings and where there is no intention for the qualifications to be paid for through Government funds.

Alongside this, given the nature of the change process in England (see section 1), the awarding bodies continue to describe their own framework of qualifications. Some sector organisations and employers use the structure of levels which was in place prior to the implementation of NVQs, or the framework of the awarding bodies. A new development (emerging over the last six years) is the Open College Network, where individual further education colleges develop units -including vocational units- which are then approved on a regional basis. This currently operates outside the national framework, but the qualifications thus developed can attract government funding under the Further Education Funding Council (FEFC).

This introduces the vital issue of funding. It is recognised by national policy makers and developers that funding can be used as a lever to further encourage the uptake of NVQs and qualifications in the national framework. However, it is also recognised that as a result of the partial coverage of levels and sectors by NVQs (with a notable failure to cover the higher levels (4 & 5), some needs currently are met only by non-NVQ qualifications. As a result, the listing of qualifications which receive Government funding (for further education courses and Government funded training programmes) includes a very substantial number of non-NVQ and non-GNVQ vocational qualifications.

In terms of mandatory and non-mandatory components, the system in England is a complex one. Employers are free to use any qualifications, although law relating to contract, equal opportunities etc. of course apply. Additionally, in some occupational areas, law is applied to health and safety qualifications and to licence to practice. This sanctions certain qualifications and training programmes as the only ones permissible. However, qualifications which are in receipt of Government funding and/or delivered in mandatory schooling are regulated by QCA, and must be submitted to QCA for approval. QCA works in close collaboration with the FEFC (Further Education Funding Council – replaced in 2000 by the Learning and Skills Council) and the DfEE (Department for Education and Employment) to ensure that the listings of approved qualifications are consistent across agencies and meet needs across all areas and levels of the system. The QCA does not currently approve vocationally-oriented qualifications delivered in Higher Education, although HE providers do use qualifications which have been approved by QCA for use in other settings.

5. The aims and functions of the classification system

Aims:

- To rationalise the qualifications system, ensuring that all levels and sectors are provided with appropriate qualifications.

with appropriate qualifications.

- To reduce complexity, overlap and duplication, and enable more effective progression in the system.
- To clarify the relationship between qualifications, and to ensure parity of esteem/value between qualifications in different segments of the system (e.g. academic and vocational).
- To ensure qualifications located in the framework meet quality criteria (through the quality criteria and approval processes).

The framework developed by the RVQ and modified by Dearing is designed to be inclusive - that is, to include all sectors and levels. The intention was to rationalise the system by reducing the numbers of overlapping qualifications and introducing qualifications to cover significant gaps in provision. However, principally due to the change strategy adopted in England, NVQs have not dominated the system to the degree originally intended, being slightly less than 50 % of the total number of vocational qualification awards in England in each year, with this total set to reduce. The 'gap filling' has been relatively successful, with qualifications now available in areas previously poorly served - e.g. retail; distribution. Government realised in the mid 90's that structural revision of the multitude of awarding bodies would be required, and in 1997 sought to encourage merger of the various academic awarding bodies and dominant NVQ and GNVQ awarding bodies. This resulted in mergers from which three main bodies emerged: OCR; EDEXCEL and AQA - although there exists 67 in total, with many bodies covering small, specialist occupational areas. AQA remains one of the largest NVQ awarding bodies, while EDEXCEL remains very prominent in higher level vocational qualifications awarded in FE colleges and in HE. With these crucial infrastructure revisions, and strategic use by NCVQ and subsequently QCA of the approval systems for vocational qualifications, there has been a trend towards a reduction in the numbers of vocational qualifications, in the number of NTOs, and the number of awarding bodies. This has gathered pace in the last three years.

The number of NVQs is reducing, as old, duplicate or little used qualifications drop from the framework:

Number of NVQs:

August 97	September 98	Dec 2000
923	881	794

Likewise, in January 1998, non-NVQ vocational qualifications which were included in the crucial Government schedule of approved qualifications (schedule 2a) numbered 3,424. By January 1999, this figure had dropped to 1800.

This area is complicated immensely by the issue of what comprises a 'recognised qualification'. The figures in the paragraph above relate to the schedule 2a listing, a list which

indicates those qualifications which meet criteria enabling them to be used in programmes funded by Government. This is crucial in conveying status and a structural role to specific qualifications; but it is not the whole story. Colleges, enterprises and training providers can use and promote other qualifications, and do so. These include company-specific certificates (including those developed by multinational corporations); other qualifications produced by awarding bodies; etc. There also exists a regionally-based network which approves qualifications devised locally by colleges of Further Education. If these are treated as individual qualifications, then the figure relating to non-GNVQ and non-NVQ qualifications rises. This lies behind the often-quoted figure that the UK has 21,000 vocational qualifications. Also, critical commentators are often not sensitive to the fact that successive national frameworks and associated policy have oscillated between inclusively and exclusivity. In 1999, despite (i) the emphasis on QCA working with Government to approve for its various schedule listings a broad range of qualifications, including non-GNVQ and non-NVQ qualifications, and (ii) that control and rationalisation strategy in the vocational qualifications area has shifted from specifying NVQs to specifying national standards on which a range of qualifications can be based, the following perspective is far from common:

'...thus there are more vocational qualifications outside the NVQ/GNVQ framework than there were before NCVQ was created. Over 60 per cent of registrations on vocational qualifications in England and Wales were outside NVQs and GNVQs, while close to 80 per cent across the FE sector were studying outside the three progression routes of GCSEs/A levels, GNVQs and NVQs...' (Wilson P, '99).

Further work is essential here to examine whether:

1. The number of people taking specific qualifications is increasing as the number of qualifications decrease, if so which qualifications.

2. The proportion of the labour force/population taking formal qualifications is decreasing, and whether this represents a real decrease in the underlying level of training (for example, there may be an increase in informal training, short duration non-certificated training etc.).

A comprehensive analysis of the underlying trends in the system, and the use of the framework as an instrument of control is given in the accompanying paper "An analysis of the implementation of levels frameworks in the English education and training system, 1986 to 1999", procedures for the development of standards.

All stages of the development of national standards is regularised, with a routine pattern emerging across all occupational sectors:

The time frame for each of the stages can vary from occupational sector to occupational sector, if there are significant problems the entire process from proposal to approval of the standards can take up to 18 months

Stage 1

NTO approaches QCA with proposal to develop national standards in a specific occupational area.

Stage 2

QCA judges merit of proposal in conjunction with SQA (Scottish Qualifications Authority) and consults with Welsh and Northern Ireland bodies.

Stage 3

After formal approval of proposal, NTO begins analysis of occupational area; which includes empirical analysis of content of work, plus consultation to verify content and language of standards.

Stage 4

NTO submits draft standards to QCA, to original group which approved development work.

Stage 5

Potential refinement following recommendations of QCA approval group.

Stage 6

After final approval and issuing of contract, national standards used for developing qualifications in conjunction with national awarding body.

The initiative to update the standards is taken by the relevant NTO. It is a possibility, though not yet realised, that if significant problems are detected by QCA quality assurance procedures in enterprises, trainers and educators using the standardsquality assurance, that QCA might initiate the process of updating the standards.

Standards currently are approved for a maximum of five (5) years. There is no formal minimum period, but the shortest period to date has been two (2) years. The average duration of approval is three (3) years.

For the development of national standards, the battery of analysis techniques for analysing occupational competence includes:

- **Work process analysis:**

Various models, essentially derived from Taylorist approaches, and refined through the 60's and 70's, based on observation of work activity, in some cases questions put to workers, and designed to feed into revised work systems, appraisal and reward systems, and grading structures.

- **Delphi:**

Discussion-based technique based on structured discussion with selected groups of experienced workers. Produces descriptions of activities which are then validated with the groups.

- **Critical incident analysis:**

Examining incidents of breakdowns in performance and/or superlative performance, using both observation of performance and questioning of workers.

- **Analytic work deriving from socio-psychological study of work:**

Crucial but often ignored, empirical and analytic work on the psychology and sociology of work built up during the late 60's onwards, and impacted particularly in areas such as the health service. The short lived Work Research Unit pioneered more systematic and strategic work in this area, but was assimilated in the early 80's into the psychology arm of the then Manpower Services Commission. Such studies are now increasing in their significance as detailed studies are drawn on by specific sectors in the development of national standards.

- **Functional analysis:**

This uses discussion with experienced practitioners, job analysis/observation techniques and some instances critical incident analysis, to identify the content of competence in an occupation. This is then broken down into blocks which correspond to functions rather than tasks, which can then be expressed as 'units of competence'. It was acknowledged by the developers of this technique (Mathews D, 1987) that the process was essentially one of generating consensus, with no one description necessarily being the best, or the process being replaceable on different occasions with different groups.

Whatever the analysis approach used, the QCA must be confident that the NTO has (i) undertaken adequate empirical analysis of the occupational functions described in the standards; and (ii) undertaken adequate consultation with industry and other interests to ensure that the standards represent the requirements of the occupational area.

6. The procedures for the validation and implementation of standards

If a set of national standards in an occupational area need to be substantially revised, it must be resubmitted through the approval process outlined above.

Each national standard is expressed to learners, the education and training system etc. through the specific NVQs based on the standards. These qualifications can have accompanying guidance, supporting explification of evidence etc. An NVQ can include 'common language' descriptions of the standards alongside the formal expressions of the standards. These are all designed to help interpretation and application of the national standard in specific occupational and/or learning settings.

7. The maintenance of standards

The NTO is responsible for maintaining the national standards. Awarding Bodies, who have designed NVQs to meet the national standards, are responsible for quality assurance in relation to the specific NVQs. QCA monitors the operation of specific NVQs through post-accreditation monitoring procedures. Specific NVQs may be investigated in depth by a QCA contract compliance team if serious complaints or anomalies in operation occur.

As stated above at section 5, standards currently are approved for a maximum of five (5) years. There is no formal minimum period, but the shortest period to date has been two (2) years. The average duration of approval is three (3) years.

8. Similarities and differences between the system used in England and the EU 5 level structure

The RVQ levels framework failed to articulate with European levels. This was explicit and deliberate. In 1986, the UK Government was pursuing relatively isolationist policy in Europe; the RVQ focused intently on strategies designed to resolve the fundamental problems of a low level of training and an incoherent national qualification framework within England and Wales. Inward-looking in character, it was concerned only with broad compatibility with EU

strategy, not precise articulation. Testimony of key policy makers in 1986 (see Oates T, 1986) and again in 1998 confirmed this lack of commitment during the mid 80's to articulation with EU structures and the tight focus on policy measures tailored to the situation in England and Wales.

Referring only once to EU systems in 60 pages, the report stated:

'...Our remit is concerned with England and Wales and not with wider issues of the United Kingdom and the European Community. We have however, taken note of the European Council decision of 16 July 1985, the aim of which is to assist mobility of labour within the Community by improving arrangements for recognition of comparability of vocational training qualifications between member States. That decision referred to a five level training structure. We have not addressed issues of comparability between that structure and our proposed framework. It is much too early to attempt any discussion of comparability. We have been advised by the MSC*, as the co-ordinating body for work on comparability of qualifications within the European Community, that our proposals are compatible with the general aim of the European Council decision...'

(RVQ 1986)

(*then a tripartite commission set up by Government (having the status of a Quasi Autonomous Non-Government Organisation (QUANGO)), subsequently re-formed as the Training Commission and then the Training Agency, then assimilated into the Department for Employment (ED) and subsequently merged with the Department for Education (DfEE) to form the Department for Education and Employment (DfEE)).

Being 'compatible with the general aim' falls far short of having an effective technical and operational relationship with EU structures. In practice, the levels framework for England and Wales possessed a number of features which resulted in poor articulation with the EU structure. The problems to which these differences gave rise became particularly evident when effort was devoted to locating English qualifications in the EU framework during the mid 90'.

The differences between the framework endorsed by the RVQ and the EU framework are both numerous and crucial:

1. Training orientation (EU) versus outcomes orientation (NVQ framework):

The contemporary Cedefop framework is based on *training* levels, whereas the NVQ levels are not related to training. The qualifications are based on outputs, and so confirm that a person has successfully completed a series of nationally-specified outcomes, irrespective of the mode, duration, or location of the learning.

2. Emphasis on entry requirements (EU) versus open access (NVQ framework):

Part of the function of NVQs is to provide certification (recognition) of workers who have developed skills over a period of time, through work rather than formal learning. Accreditation of prior learning/achievement is seen as an important requirement in the UK, which has possessed a comparatively low level of training. Thus, although in a few sectors at particular levels, 'prerequisites' are stated for certain units/qualifications, the NVQ criteria in the main emphasise open access to units/qualifications. The NVQ levels framework is therefore not based on a 'route map' of what needs to be taken in order to progress to a higher level, nor based on a necessary 'ladder' of progression.

3. Emphasis on comparative relationships (EU) versus qualitative revision of qualifications (NVQ framework):

The Cedefop framework was not intended to qualitatively revise national qualifications, but to enable qualifications to be related one with another - both at a given level and in terms of progression and prerequisites. In contrast, while the early policy work of NCVQ did allow entry of existing qualifications to the NVQ levels (provisional accreditation), the second phase of NCVQ work (1988-96) focused on development of NVQs as a replacement for existing qualifications. The third phase (1996-on) of national development effort (under the newly formed QCA) marked a partial return to trying to bring existing qualifications into the levels framework, by allocating non-NVQ qualifications to a 'notional level', and by focusing national development effort on the provision of national standards rather than complete qualifications.

Perhaps the most incisive perspective on the possibility of EU harmonisation comes from Cedefop:

'...the pragmatic method of comparing vocational training certificates developed and successfully applied by Cedefop will not produce practical results, however, until progress is made towards the approximation of living and working conditions through European integration, as required by the treaties of Rome...' (Sellin B,1995).

9. The way in which the European 5-level structure is used in England

As emphasised throughout this paper, the continued - but slowly reducing - complexity in the English system means that no single levels framework predominates the reality of the education and training system. The existence of a national system of vocational qualifications is relatively new (1986) while the national framework encompassing academic and vocational qualifications is a very recent development (designed in 1996 and implemented in 2000). While the national framework is emphasised in national policy, and is a point of reference for organisations' policy and development work, there continue to exist a wide range of frameworks - such as the awarding body structures.

As outlined above, and more fully in **'An analysis of the implementation of levels frameworks in the English education and training system, 1986 to 1999'**, the framework developed by the RVQ related to the 5-level EU framework in the following way:

key characteristics EU framework	key characteristics RVQ framework for NVQs
1 Training orientation	1 Outcomes orientation
2 Emphasis on entry requirements	2 Open access
3 Focus on comparative relationships	3 Focus on qualitative revision of qualifications

Contrary to assumptions made by many researchers, the RVQ framework was not constructed with any deliberate reference to the EU levels. Currently, there is scarce day-to-day reference to the EU levels, although some researchers familiar with Cedefop work and engaged with international comparative studies are aware of the framework and use it for comparative purposes. It does not figure in national policy discussions relating to rationalisation of the English qualifications system.

While policy makers in England have been developing and refining the NQF, statisticians in the DfEE and ONS (Office for National Statistics) have submitted annual statistical returns to the OECD, using the OECD classification system. This contrasts with the NQF not only in respect of the number of levels and their precise pitch, but also in respect of the way in which the level are defined.

The NQF can best be characterised as an 'equating' system; a framework where qualifications such as GNVQs and A levels are deemed to be equivalent but with no common descriptors for

the levels. In contrast, the ISCED framework (and many other national systems) can be characterised as 'descriptive' frameworks, where qualifications can only be located in a particular level if they meet the common descriptors applying to that level.

Another important difference lies in the extent to which the ISCED framework uses descriptors relating not only to content and outcomes of qualifications, but duration of learning. This extends the significance of the framework as a tool for establishing and/or regulating the quality of training/education, even if it lends further complication to the issue of transnational equating of qualifications.

ANNEX 1

List of interests consulted in 1985 RVQ

1. The Working Group submitted its Interim Report to Ministers and the Chairman of the MSC on 23 September 1985. The report contained:

   - a statement of the desired objectives of a vocational qualifications system;
   - options for a structure of vocational qualifications;
   - options for the machinery to bring about change;
   - recommendations relating to the certification of achievement in the extended Youth Training Scheme, and
   - a note of the Working Groups programme of further work, leading to preparation of the final report.

Over 10,000 copies of the Interim Report were distributed.

2. Following publication 90 formal responses were received, an alphabetical list of which follows. The Chairman of the Working Group also sought meetings with the major interested parties and in all 25 consultative meetings were held. In addition, a number of informal seminars were held where concerned parties were able to discuss the issues thoroughly. The purposes of these discussions were:

   - to contribute to securing a consensus on the options and issues presented in the report;
   - to comment on the recommended timetable for implementation;
   - to expose issues for further consideration and debate, and
   - to assist in shaping the final report.

The following events took place to further this process:

- seminars for local education interests, organised by FEU and FESC;
- a CBI workshop;
- the Industrial Society brought together for discussion a wide range of interested bodies in education and industry;

- a meeting of the Chief Officers of ITBs;
- a meeting of the executive group of Non-statutory Training Organisations;
- the British Association for Commercial and Industrial Education, the British Institute of Management and the Institute of Personnel Management held separate seminars, and
- the Society of Education Officers arranged consultations within its regions and brought together a group for final national consultations.

3. The Scottish Education Department and the MSC Office for Scotland co-ordinated the consultative exercise with educational and industrial interests respectively in Scotland.

4. In Northern Ireland, the Departments of Education and Economic Development held discussion seminars and co-ordinated responses from a wide range of interests.

5. There have been meetings with and/or written comments from a significant number of the major interested bodies across all sectors. Responses were very supportive of the objectives of the Working Group and the need for change was recognised. The balance of opinion preferred a framework of levels as the basis for an improved structure for vocational qualifications and there was overwhelming support for a new national body to implement change. There was also general support for the recommendations for YTS certification and belief that YTS certification should be integrated into the overall structure as soon as possible.

Organisations who responded to the Interim Report

Agricultural Training Board

Association of Accounting Technicians

Association of Agricultural Education Staffs

Association of British Travel Agents National Training Board

Association of Colleges for Further and Higher Education

Association of County Councils

Association of Metropolitan Authorities

Association of Polytechnic Teachers

Association of Principals of Colleges

Bicton College of Agriculture

British Institute of Management

Building Employers' Confederation

Business and Technician Education Council

City and Guilds of London Institute

City of Salford Education Department

Clothing and Allied Products Industry Training Board

College of Preceptors

College of Speech Therapists

Commission for Racial Equality

Committee of Directors of Polytechnics

Committee of Heads of Educational Institutions

Committee of Vice Chancellors and Principals

Confederation of British Industry

Construction Industry Training Board

Cornwall and Devon Area Manpower Board

Council for National Academic Awards

Council for Professions Supplementary to Medicine

Convention of Scottish Local Authorities

East Anglian Regional Advisory Council for Further Education

Electrical Contractors' Association

Engineering Industry Training Board

Engineering Industry Training Board - Scotland

Equal Opportunities Commission

Federation of Civil Engineering Contractors

Food Manufacturers' Council for Industrial Training

Further Education Unit

General Dental Council

Hereford and Worcester Principal Careers Officers' Group

Her Majesty's Inspectorate

Horticultural Trades Association

Huddersfield Technical College

Industrial Society

Institute of Administrative Management

Institute of Export

Institute of Legal Executives

Institute of Meat

Institute of Personnel Management

Institute of Science Technology

Insurance Industry Training Council

Joint Industry Board for Plumbing Mechanical Engineering Services in England and Wales

Leeds College of Building

Lincolnshire Area Manpower Board

London Chamber of Commerce and Industry

London South & West Area Manpower Board

National Association of Schoolmasters/Union of Women Teachers

National Advisory Body for Public Sector Higher Education in England

National Advisory Council on Employment of Disabled People

National and Local Government Officers' Association

National Association of Head Teachers

National Association of Principal Agricultural Education Officers

National Association of Teachers in Further and Higher Education

National Bureau for Handicapped Students

National Joint Council for the Building Industry

National Nursery Examination Board

National Union of Students

Offshore Petroleum Industry Training Board

Pitman Examinations Institute

Polytechnic of the South Bank

Post-16 Network

Professional Association of Teachers

Regional Council for Further Education for the South West

Richmond upon Thames College

Road Transport Industry Training Board

Rotherham Metropolitan Borough Council

Royal Society of Arts

Royal Society of Chemistry

School Curriculum Development Committee

Scottish Council Development and Industry

Secondary Examinations Council

Secondary Heads Association

Society of Education Officers

Society of Surveying Technicians

Standing Conference of Regional Advisory Councils

Standing Conference on University Entrance

Tertiary Colleges' Association

Trades Union Congress

Union of Construction, Allied Trades & Technicians

Welsh Joint Education Committee

West Midlands Advisory Council for Further Education

Yorkshire and Humberside Association for Further and Higher Education

ANNEX 2

List of NTOs (National Training Organisations)

Council for Administration Metier

Bakery Training Council

Banks and Building Societies NTO

Banks and Building Societies NTO

Skillset

Association for Ceramic Training and Development

Chemical Manufacturing and Processing NTO

Cleaning and Support Services NTO (CSSA)

CAPITB Trust

The Training Alliance for Surface Coatings

Community Justice NTO

Construction Industry Training Board (CITB)

Cultural Heritage NTO

Institute of Customer Service

Dairy Training and Development Council

Distributive NTO

Early Years NTO

National Electrotechnical Training

Electricity Training Association

Electronics and Software Services NTO

Employment NTO

Engineering and Marine Training Authority (EMTA)

Engineering Construction Industry Training Board (ECITB)

Engineering Services Training Trust Ltd (ESTTL)

EPIC (NTO) Ltd

Food and Drink NTO

Further Education NTO

Gas Industry NTO

Glass Training Ltd

Hairdressing And Beauty Industry Authority

Health Care NTO

The Higher Education Training Organisation

Hospitality Training Foundation

Housing NTO

Information Technology NTO

Insurance and Related Financial Services NTO

Lantra

Languages NTO

Local Government NTO

Management and Enterprise NTO

Meat Training Council

Motor Industry Training Council

OPITO (NTO)

Paper Education and Training Council

TRANSFED (Passenger Transport Forum for Employee Development Limited)

Petroleum Industry NTO

Pharmaceutical Industry NTO

British Plumbing Employers' Council (Training) Ltd

Polymers and Associated Industries NTO

British Ports Industry Training Ltd

Print and Graphic Communication NTO

England and Wales Prison Service Training Services

Rail Industry Training Council Ltd

Refractories and Building Products Training Council

Road Haulage and Distribution Training Council

Science, Technology and Mathematics Council

Seafish Training

Security Industry NTO

Training Organisation for Personal Social Services

Sports and Recreation NTO

Steel Industry NTO

Telecommunications Vocational Standards Council

Ttento

Voluntary Sector NTO

Board for Education and Training in the Water Industry

References

Cedefop, European Centre for the Development of Vocational Training, Andersson, R. and Olsson, A., *Development of an Internationally comparable Classification for Fields of Vocational Education and Training*, , Thessaloniki and Eurostat, Luxembourg, 1999

DTI, *The impact on vocational training of studies analysing and forecasting trends in occupations*, Cedefop document, 1998

Cedefop (Sellin, B.): *Anticipation of trends in occupations and qualifications*, in www.ETV.gr (as PDF file)

Cedefop (Sellin, B.): *Do common European training standards stand a chance*, Thessaloniki 1997

Cedefop (Sellin,B.),: *European trends in the development of occupations and qualifications*, volume II, Luxemburg, 1999

NETREF, *A network of national reference structures for vocational qualifications, summary report results*, COLO, 1998

OECD, 1999, *Classifying Educational Programmes*, Manual for ISCED1997 implementation, 1999 edition

Scherer, W.: *Transparenz beruflicher Befähigungsnachweise in Europa*, Cedefop Thessaliniki 1997

Streumer, W. and others, 1996, *Richtlijnen voor het formuleren van eindtermen*, CINOP, 's-Hertogenbosch

FOR GERMANY

Adler, T., Benner, H.: *Regelung der Berufsausbildung in der Bundesrepublik Deutschland, in: Ausbildungsberufe im Wandel*, ed.: Bundesinstitut für Berufsbildung. Der Generalsekretär, Ergebnisse, Veröffentlichungen und Materialien aus dem BIBB, xeroxed MS, 1995

Benner, H.: *Ordnung der staatlich anerkannten Ausbildungsberufe*, ed.: Bundesinstitut für Berufsbildung. Der Generalsekretär, Bielefeld, 1995

BMBF 1997 (= Federal Ministry of Education and Research): *Reformprojekt Berufliche Bildung*, xeroxed MS, Berlin and Bonn

Bundesinstitut für Berufsbildung. Der Generalsekretär (ed.), 1992: *Weiterbildungsberufe – Berufe mit Zukunft*. Ergebnisse, Veröffentlichungen und Materialien aus dem BIBB, Berlin, xeroxed MS, Berlin and Bonn

Bundesinstitut für Berufsbildung. Der Generalsekretär, 1995: *Vorlage zur Sitzung 3/95 des Unterausschusses 2 – Strukturfragen der beruflichen Bildung* – am 22. November 1995 in Bonn, Top 3 – Beratungsvorlage zu dem Thema Gesundheitsberufe, xeroxed MS

Bundesinstitut für Berufsbildung, Der Generalsekretär (ed.), 1996: *Entwicklungschancen durch Weiterbildung: Weiterbildung und Alternativen*. Ergebnisse, Veröffentlichungen und Materialien aus dem BIBB, Berlin and Bonn

Bundesinstitut für Berufsbildung. Der Generalsekretär, 1999: *Vorlage zur Beschlußfassung zur Sitzung 1/99 des Hauptausschusses am 18./19.* März 1999 in Bonn, xeroxed MS

Bundesausschuß für Berufsbildung, 1976: *Empfehlungen über Kriterien und Verfahren für den Erlaß von Weiterbildungsordnungen und deren Gliederung*, in: Berufsbildung in Wissenschaft und Praxis, no. 2, p. 4-5

Bundesinstitut für Berufsbildung, 1997: Kriterien der Arbeitgeber vom Januar 1997 und der Gewerkschaften von November 1996, *Vorlage für den Hauptausschuß* vom 19.2.1997

Collingro, P., Heitmann, G., Schild, H., 1997: *Identifizierung, Bewertung und Anerkennung von früher und informell erworbenen Kenntnissen* – Deutschland, Cedefop – European Centre for the Development of Vocational Training, Thessaloniki

Finegold, D., Keltner, B.: *A Cross-National Perspective on Skill Standards Systems*, Conference paper, 1997

Hecker, U., 1993: *Lehrgänge zur Vorbereitung auf die Externenprüfung* – Unterstützung beim nachträglichen Erwerb des Berufsabschlusses, in: Berufsbildung in Wissenschaft und Praxis, Vol. 22, no. 3, pp. 32-37

Hoch, H.D.: *Generalisten oder Spezialisten - Neue Portraits für die Bauberufe* -Referat auf den Hochschultagen Berufliche Bildung am 23. September 1998 in Dresden, MS, 1999

KMK 1992 (= Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany), *Rahmenvereinbarung über die Ausbildung und Prüfung zum technischen Assistenten/zur technischen Assistentin an Berufsfachschulen* vom 12.6.1992, version dated 26.6.1998

KMK 1997a (= Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany), *Handreichungen für die Erarbeitung von Rahmenlehrplänen der Kultusministerkonferenz für den berufsbezogenen Unterricht in der Berufsschule und ihre Abstimmung mit Ausbildungsordnungen des Bundes für anerkannte Ausbildungsberufe*, Bonn, xeroxed MS, version dated 12.6.1997

KMK 1997b (= Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany), *Rahmenvereinbarung über die Berufsfachschulen* (Beschluß der Kultusministerkonferenz vom 28.2.1997), in: *Berufsbildung*, no. 45/1997, pp. 43-47

KMK 1998 (=Secretariat of the Standing Conference of Ministers of Education of the Federal States of the Federal Republic of Germany), *Rahmenvereinbarung über Fachschulen mit zweijähriger Ausbildungsdauer*, (Beschluß der Kultusministerkonferenz vom 12.6.1992 in der Fassung vom 2.10.1998), Bonn, xeroxed MS

Koch, Rita, 1995: *Fünf-Stufen-Schema der EG von 1985 - Untersuchung über Auswirkungen der Zuordnung deutscher Berufsabschlüsse*, Institut der Deutschen Wirtschaft, Köln, xeroxed MS

Letzner, S., Tillmann, H.: *Die Weiterbildungsregelungen der zuständigen Stellen.* Ordnungsstruktur und Entwicklungstendenzen, (ed.) Bundesinstitut für Berufsbildung. Der Generalsekretär, Wissenschaftliches Diskussionspapier, no. 33, Berlin and Bonn, 1998

Marek, S./Neumann, K.-H.: *Qualifikationsangebote über berufliche Vollzeitschulen und Berufsakademien*, Teil I: Berufsfachschulen, Arbeitsgemeinschaft für angewandte Sozialforschung, Munich, xeroxed MS, 1999

Meifort, B.: Warum ein BBiG-geregelter Pflegeberuf? *Argumente für die Übernahme des dualen Systems in die Berufsbildung der Gesundheits- und Sozialpflege*, in: Meifort, B., 1998

Mettin, G.: Gesundheitspflegerin/Gesundheitspfleger – *Überlegungen zu einem neuen Berufsbild für die Pflege nach BBiG*, (ed.) Bundesinstitut für Berufsbildung. Der Generalsekretär, Bielefeld

Meifort, B.: *Probleme der Verrechtlichung der Berufsbildung für Berufe im Gesundheits- und Sozialwesen, in: (ed.) Bundesinstitut für Berufsbildung*. Der Generalsekretär: Berufsbildung und Beschäftigung im personenbezogenen Dienstleistungssektor, Wissenschaftliche Diskussionspapiere, Berlin, 1999

Meifort, B., Mettin, G.: *Gesundheitspflegerin/Gesundheitspfleger – Überlegungen zu einem neuen Berufsbild für die Pflege nach BBiG*, (ed.) Bundesinstitut für Berufsbildung. Der Generalsekretär, Bielefeld 1998

Scholz, D.: *Meisterregelungen, in: Cramer, G. et al.: Ausbilder-Handbuch*, Abschnitt 5.10.3, p. 4,-Cologne, 1996

Stiller, I.: *Verfahren zur Erstellung von Ausbildungsordnungen*, in: Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 9.3.2, Cologne, 1995

Tillmann, H.: *Steuerung und Regelung der beruflichen Weiterbildung*, Kurseinheit 2, Steuern und Regeln beruflicher Weiterbildung im Rahmen des Berufsbildungsgesetzes (BBiG), Fernuniversität – Gesamthochschule in Hagen, 1989

Tillmann, H.: *Weiterbildungsregelungen der Zuständigen Stellen*, in: Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 5.10.1, p. 4, Cologne, 1995

Tillmann, H.: *Weiterbildungsregelungen des Bundes*, in: Cramer, G. et al.: Ausbilder-Handbuch, Abschnitt 5.10.1, p. 4, Cologne, 1995

FOR SPAIN

Del Rey Guanter, Salvador, 1998, *La negociación colectiva tras la reforma laboral de 1994. Perspectivas a la luz de los acuerdos colectivos de 1997.* Estudios 62. Consejo Económico y Social; Madrid

Acuerdo sobre Cobertura de Vacíos. Resolution of 13th May 1997

MEC. *White Paper on the Reform of the Education System;* Madrid, 1989

De Pablo, Antonio, 1997, *La nueva formación profesional: Dificultades de una construcción.* REIS 77-78; Madrid, p.156.

Moreno Piñero, Fernando and Parra Abad, Eloy, 1993, *Clasificación professional y Movilidad.* Revista de Economía y Sociología 21-22; Madrid.

Prieto, C. and Homs, O., "*Formation, emploi et compétitivité en Espagne*". Sociologie du Travail 4: 557-575.

Manzanares, José, 1993, "*El conocimiento de las cualificaciones en España y su optimización*". Revista de Economía y Sociología 21-22; Madrid.

Inem, "*Plan de actuación para la actualización de la formación profesional. Estudios sectoriales de necesidades de formación*"; Madrid.

Manzanares, José, 1999, "*Cualificación, formación y clasificación profesional. Notas para un debate*". Herramientas 53; Madrid.

FOR FRANCE

Affichard J., 1983, *Nomenclatures de formation et pratiques de classement,* Formation Emploi n°4, octobre - décembre, pp. 47-61

Fourastié J., 1963 : *Image de la population active en 1975 selon le niveau de qualification,* Population, juillet - septembre

Commissariat général du Plan d'équipement et de productivité, *V^ème Plan 1966-1970, Rapport général de la Commission de la main-d'œuvre*, mars 1966

Vimont C. et N. Dubrulle, 1966, *La prévision de l'emploi dans le cadre du V^ème Plan en France, 2^ème partie: Essai de calcul des besoins de recrutement par niveau et type de formation*, Population, septembre - octobre

Conseil National de l'Information Statistique, *Nomenclature des spécialités de formation – guide d'utilisation*, Journal Officiel, Paris, 1994

FOR THE NETHERLANDS

ACOA, *De ontwikkeling van de kwalificatiestructuur voor het secundaire beroepsonderwijs: een tussenstand (discussienota)*, ACOA, 1996

ACOA, *Verder aan het werk met de WEB, de ontwikkeling van de kwalificatiestructuur voor secundair beroepsonderwijs*, ACOA, 1997

Blokhuis, F., van Zolingen, S., *De kern te pakken: sleutelkwalificaties, kernproblemen en de landelijke kwalificatiestructuur*, CINOP/ Universiteit Twente, 1997

Blokhuis, F., R. Klarus, 1997, *Accreditation of Prior Learning in the Netherlands*, CINOP

CBS, 1999, *Standaard onderwijsindeling*, editie 1998/1999, CBS

Commissie Herijking Kwalificatiestructuur, 1995, *Kwalificatiestructuur secundair beroepsonderwijs: advies van de commissie herijking kwalificatiestructuur*

ISCED, 1997, *International Standard Classification of Education*, UNESCO

Ministerie OC&W, 1996, *WEB, de wet educatie beroepsonderwijs, de kwalificatiestructuur beroepsonderwijs*

Ministerie OC&W, 1994, *Format kwalificatiestructuur, het indelingsschema van de kwalificatiestructuur secundair beroepsonderwijs*

Ministerie OC&W, HOOP, 1997, *Ontwerp Hoger Onderwijs en Onderzoek Plan 1998*

Ministerie van OC&W, 1999, *Ontwerp Hoger Onderwijs en Onderzoek Plan 2000*

Mechelen, R.P.M. van, *Vergelijkend onderzoek eindtermen, vestigingskwalificaties en WEB-kwalificaties, eindrapportage BVE raad*, CINOP, 1997

Meteren, J., *Kwalificatiestructuur en infrastructuur, casus verzorging en verpleging*, CINOP, 1998

Nafzger, J., *Reconstructie Format voor kwalificatiestructuren*, CINOP, 1997

Swager, R., 1995/1996, *Getuigen van niveau, de niveauclassificatie verduidelijkt*, CIBB(CINOP)

Vereniging van Hogescholen, *Niet meer maar beter, verslag van de commissie referentiekader onderwijsaanbod, 1995*

Visser, K., F. Blokhuis, R. Klarus (red.), *Jaarboek kwalificatiestructuur*, CINOP,1998

Visser, K., 1992, *Beroepsonderwijs en scholing in Nederland*, CIBB, 1992

Visser, K., *Systems and procedures of certification of qualifications in the Netherlands*, CIBB, 1992

FOR UNITED KINGDOM (ENGLAND & WALES)

Adey P. & Yates C., *Better learning – a report from the Cognitive Acceleration in Science Education project*, Kings College, London , 1990

Archer M., *The social origins of education systems*, Sage, 1979

Boaler J., *How valuable is international test success?* King's College, London, 1996

CBI, , *Towards a skills revolution*, Confederation of British Industry, 1989

BSA, *The literacy and numeracy of adults*, Basic Skills Agency , 1995

Dearing R., *Review of the national curriculum*, Schools Curriculum and Assessment Authority, 1994

Dearing R., *The review of qualifications for 16-19 year olds*, Schools Curriculum and Assessment Authority, 1996

DES and ED, *Working together - education and training*, HMSO , 1986

Eraut M.,*Developing professional knowledge and competence*, Falmer Press, 1994

Finegold D. & Soskice D., *The failure of training in Britain: an analysis and prescription, 1988*, Oxford Review of economic policy, vol 3 #2, p21-53

Finegold D., 1991, *Institutional incentives and skill creation: preconditions for a high-skill equilibrium* in Ryan P., 1991, *International comparisons of vocational education and training for intermediate skills*, Falmer

Fitzgibbon C. et al, *Learning styles in GNVQs*, National Council for Vocational Qualifications,1997

Green A., *Education and state formation*, Macmillan, 1991

Green A., *Education, globalisation and the nation state*, Macmillan, 1997

Hart K. et al,*Mathematical Understanding in children 5-16*, Macmillan , 1979

Hyland T., *Competence, education and NVQs – dissenting perspectives*, Cassell education, 1994

Jessup G., *Outcomes. NVQs and the emerging model of education and training*, Falmer, 1991

Mansfield R. & Mathews D., *Job competence*, Further Education Staff College , 1985

MSC, *NTI – a new training initiative*, Manpower Services Commission

NACETT, *National education and training targets*, National Council for Education and Training Targets

Nickell S. & Bell B., 1995, *The collapse in demand for the unskilled and unemployed across the OECD*, Oxford review of economic policy 11 1

Oates T., *The RVQ levels*, Further Education Staff College, 1986

Oates T., *Developing and piloting the NCVQ key skills units*, National Council for Vocational Qualifications, 1991

Oates T., *Core skills and transfer – aiming high*, in Educational and training technology international vol29 #3, Kogan Page, 1992

Oates T., *A converging system? Explaining difference in the academic and vocational tracks in England and Wales*, Center on education and training for employment, Ohio State University Columbus Ohio, 1995

Oates T., *The development and implementation of key skills in England and Wales*, National Council for Vocational Qualifications, 1996

Oates T. and Fettes P, 1998 *Key skills strategy paper* Qualifications and Curriculum Authority

Oates T., *Analysing and describing competence – critical perspectives* Qualifications and Assessment Authority, 1999

Oates T., *An analysis of the implementation of levels frameworks in the English education and training system 1986 to 1999*, Qualification and Curriculum Authority , 2000

Pirie S., 1984, *Calculating the risks*, Nursing Standard 1984, July 12th

Reuling J., 1994, *Beruf princip*, Paper to the third international conference of learning at work Milan, June 1994

Robinson P., *Education, training and the youth labour market,* Institute for public policy research , 1998

Ryan P., 1991, *Initial training, labour market structure and public policy: intermediate skills in British and German industry* in Ryan P., 1991. *International comparisons of vocational education and training for intermediate skills,* Falmer

RVQ, 1986, *Review of vocational qualifications,* Department of education and science and Manpower services commission

Sellin B., 1985. *Comparability of vocational training levels,* Cedefop, Vocational Training 1985

Tapper T. & Salter B., *Education and the political order,* Macmillan, 1978

Tapper T. & Salter B., *Education , politics and the state,* Macmillan, 1981

Senker P., *The relationship of the NVQ system to learning in the workplace,* Paper to conference, The certification of vocational qualifications in France and the United Kingdom, CEREQ, Marseilles, March 2000

Steedman H., *Apprenticeship – a strategy for growth,* London School of Economics – centre for economic performance, 1998

Wilmott A. & Cresswell M., *Levels in national curriculum assessment,* Schools Examinations and Assessment Council , 1988

Wilson P., *Lifelong leaning – developing qualifications to support lifelong learners,* National Institute for adult and continuing education , 1999

Wolf A., *Learning in context – patterns of skill transfer and their learning implications* Training Agency, 1989

Wolf A., 1991, *Assessing key skills – wisdom or wild goose chase?,* Cambridge journal of education, 189-201

Berghe, Van den, W., *Indikatoren aus verschiedenen Perspektiven* , Die Anwendung von Qualitätsindikatoren in der beruflichen Bildung und Ausbildung, Cedefop European Center for the Development of Vocational Trainig , Dokument, Thessaloniki, 1998

Bjornavold, J., 1998, *Assessment of non-formal learning: the quality and limitations of methodologies*, in: Vocational Training Nr. 12, European Journal

BMBF, Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie, 1996, *Äquivalenzen im Hochschulbereich* , Bonn

Cedefop-Panorama, , *Systeme und Verfahren der Zertifizierung von Qualifikationen in der Europäischen Gemeinschaft,* Thessaloniki ,July 1993

Commission de Titres d'Ingenieur (CTI), 1998, *References and Orientations* , Paris

Council of Europe/UNESCO, Convention on the Recognition of Qualifications concerning higher education in the European region, Lisbon, 11.4.1997, for details: *Explanatory report to the convention* .

Dutch Validation Council (D.V.C.), *Manual for the validation of Master Courses* , 1998

European Ministers of Education, *The European higher education area, Joint declaration of the European Ministers of Education;* convened in Bologna, 19th of June 1999

Hochschulrahmengesetz (HRG), in der Fassung vom 20.8.1998, § 19

Hochschulrektorenkonferenz (HRK), 1999, die HRK hat eine von den Hochschulen abrufbare und leicht einsetzbare *Software zur Einführung des „Diploma Supplement"* entwickelt, Bonn, HRK-Pressemitteilung vom 10.11.99

Jablonska-Skinder, H., Teichler, U.: *Handbook of Higher Education Diplomas*

Joint declaration on the harmonisation of the architecture of the European higher education system, May 25th, 1998, by the four Ministers in charge for France, Germany, Italy and the United Kingdom, Paris, the Sorbonne.

Kultusministerkonferenz (KMK), 1996, *Vereinbarung der Kultusministerkonferenz der Fachrichtungen*, Studiengänge und Diplomgrade an Fachhochschulen. Bonn, Beschluß der KMK vom 20.10.96

National Committee of Inquiry into Higher Education (NCIHE) *Education in the Learning Society*, The Dearing Report, London, HMSO, 1997

OECD, *Education at a Glance*, OECD Indicators, Paris,1998

OECD, *Redefining Tertiary Education* , Paris, 1998

QAA, The Quality Assurance Agency for Higher Education, 1999, *The way ahead*, in: higher quality, Bulletin of the QAA, 4/October 1999

QAA, 1999, *A consultative paper on Higher Education Qualifications Frameworks for England, Wales an Northern Ireland (EWNI), and for Scotland*

Sellin, B. *„Do joint European vocational training standards stand a chance?*, Discussion paper, Cedefop-Panorama, 1996

Teichler, U., 1999, *Studieren bald 50 % eines Geburtsjahrgangs?* in: Hochschulwesen 4/99, p. 114-119.

Vroeijenstijn, A.I., 1998, *External Quality Assessment in the Netherlands: The third generation*, Utrecht, contribution to the 1. European Workshop on Assessment of Engineering Education Programmes (EWAEP 1), Gent, 1998

Appendix 1: The European five-level FRAMEWORK

Council decision

Of 16 July 1985

On the comparability of vocational training qualifications between the Member States of the European Community (85/368/EEC)

The Council of the European Communities

Having regard to the Treaty establishing the European Economic Community, and in particular Article 128 thereof,

Having regard to the Council Decision 63/266/EEC of 2 April 1963 laying down general principles for implementing a common vocational training policy (1), and in particular the eighth principle thereof.

Having regard to the proposal from the Commission, as amended on 17 July 1984,

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas the eighth principle of Decision 63/266/EEC is to make it possible to achieve the mutual recognition of certificates and other documents confirming completion of vocational training;

Whereas the Council resolution of 6 June 1974 (4) on the mutual recognition of diplomas, certificates and other evidence of formal qualifications requires lists of such qualifications recognized as being equivalent to be drawn up;

Whereas the absence of the said mutual recognition is a factor inhibiting freedom of movement for workers within the Community, insofar as it restricts the possibility for workers seeking employment in one Member State to rely on vocational qualifications which they have obtained in another Member State;

Whereas there is a very substantial degree of diversity in the vocational training systems in the Community; whereas these systems are constantly requiring adaptation to the new situations brought about by the impact of technological change on employment and job content;

Whereas the Council resolution of 11 July 1983 concerning vocational training policies in the European Community in the 1980s (5) affirmed the need for a convergence of policies in the vocational training field, whilst recognizing the diversity of training systems in the Member

States, and the need for Community action to be flexible;

Whereas it has been possible for the Commission to establish as a reference point, with the help of the Advisory Committee for Vocational Training, a structure of levels of training which represents a first step towards the achievement of the aims laid down in the eighth principle of Decision 63/266/EEC, but whereas this structure does not reflect all the training systems being developed in the Member States;

Whereas for the skilled-worker level within this structure, and for selected priority groups of occupations, it has been possible to arrive at practical job descriptions and to identify the corresponding vocational training qualifications in the various Member States;

Whereas consultation with the vocational sectors concerned has provided evidence that these results can provide firms, workers and public authorities with valuable information concerning the comparability of vocational training qualifications;

Whereas the same basic methodology could be applied to other occupations or groups of occupations on advice from the Advisory Committee for Vocational Training and with the collaboration of employers, workers and the public authorities in the vocational sectors concerned;

Whereas it is therefore essential to make rapid progress towards the comparability of vocational training qualifications for all skilled workers, and to extend the work to other levels of training as quickly as possible;

Whereas it is advisable to have all the necessary opinions, in particular that of the Advisory Committee for Vocational training, and the technical assistance of the European Centre for the Development of Vocational Training, and to enable the Member States and the Commission to act in accordance with existing procedures;

Whereas the Advisory Committee for Vocational Training delivered an opinion at its meeting on 18 and 19 January 1983;

Whereas paragraph 21 of the report of the Committee on a People's Europe of 29 and 30 March 1985 should be taken into account,

Has adopted this decision

Article 1

The aim of enabling workers to make better use of their qualifications, in particular for the purposes of obtaining suitable employment in another Member State, shall require, for features of job descriptions mutually agreed by the Member States on behalf of workers, within the meaning of Article 128 of the Treaty, expedited common action by the Member

States and the Commission to establish the comparability of vocational training qualifications in the Community and improved information on the subject.

Article 2

(1) The Commission, in close cooperation with the Member States, shall undertake work to fulfil the aims set out in Article 1 on the comparability of vocational training qualifications between the various Member States, in respect of specific occupations or groups of occupations.

(2) The work may use a reference the structure of training levels drawn up by the Commission with the help of the Advisory Committee for Vocational Training. The text of the said structure is attached to this Decision for information purposes.

(3) The work referred to in paragraph 2 shall first and foremost concentrate on the occupational qualifications of skilled workers in mutually agreed occupations or groups of occupations.

(4) The scope of this Decision may subsequently be extended to permit work to be undertaken, on a proposal from the Commission, at other levels of training.

(5) The SEDOC register, used in connection with the European system for the international clearing of vacancies and applications for employment, shall, whenever possible, be used as the common frame of reference for vocational classifications.

Article 3

The following working procedure shall be employed by the Commission in establishing the comparability of vocational training qualifications in close cooperation with the Member States and the organisations of workers and employers at Community level:

(1) selection of the relevant occupations or groups of occupations on a proposal from the Member States or the competent employer or worker organisations at Community level;

(2) drawing up mutually agreed Community job descriptions for the occupations or groups of occupations referred to in the first indent;

(3) matching the vocational training qualification recognised in the various Member States with the job descriptions referred to the second indent;

(4) establishing tables incorporating information on:
(a) the SEDOC and national classification codes;
(b) the level of vocational training;

(c) for each Member State, the vocational title and corresponding vocational training qualifications;
(d) the organisations and institutions responsible for dispensing vocational training;
(e) the authorities and organisations competent to issue or to validate diplomas, certificates, or other documents certifying that vocational training has been acquired;

(5) publication of the mutually agreed Community job descriptions and the comparative tables in the Official Journal of the European Communities;

(6) establishment, within the meaning of Article 4 (3), of a standard information sheet for each occupation or group of occupations, to be published in the Official Journal of the European Communities;

(7) dissemination of information on the established comparabilities to all appropriate bodies at national, regional and local levels, as well as throughout the occupational sectors concerned.

This action could be supported by the creation of a Community-wide database, if experience shows the need for such a base

Article 4

(1) Each Member State shall designate a coordination body, based wherever possible on existing structures, which shall be responsible for ensuring – in close collaboration with the social partners and the occupational sectors concerned – the proper dissemination of information to all interested bodies. The Member States shall also designate the body responsible for contacts with the coordination bodies in other Member States and with the Commission.

(2) The coordination bodies of the Member States shall be competent to establish appropriate arrangements with regard to vocational training information for their competent national, regional or local bodies as well as for their own nationals wishing to work in other member States and for workers who are nationals of other Member States, on established cases of comparable vocational qualifications.

(3) The bodies referred to in paragraph 2 may supply on request in all Member States an information sheet drawn up in accordance with the model provided for in the sixth indent of Article 3, which the worker may present to the employer together with his national certificate.

(4) The commission is to continue studying the introduction of the European vocational training pass advocated by the Committee for a People's Europe in paragraph 21 of its report of 29 and 30 March 1985.

(5) The Commission shall give the bodies referred to in paragraph 2, on request, all necessary assistance and advice concerning the preparation and setting up of the arrangements provided for in paragraph 2, including the adaptation and checking of the relevant technical documents.

Article 5

The Commission shall, in close liaison with the national coordination bodies designated by the Member States,

(1) review and update at appropriate, regular intervals, in close cooperation with the Member States and the organisations of workers and employers at Community level, the mutually agreed Community job descriptions and the comparative tables relating to the comparability of vocational training qualifications;

(2) where necessary, formulate proposals for a more efficient operation of the system including other measures likely to improve the situation as regards the comparability of vocational qualification certificates;

(3) where necessary, assist in the case of technical difficulties encountered by the national authorities of specialised bodies concerned.

Article 6

Each Member State shall submit to the Commission, for the first time two years after adoption of this Decision, and therefore every four years, a national report on the implementation of this Decision and the results obtained.

The Commission shall, at appropriate intervals, submit a report on its own work and on the application of this Decision in the Member States.

Article 7

This Decision is addressed to the Member States and the Commission.

Done at Brussels, 16 July 1985.

For the Council

The President

M. Fischbach

(1) OJ No 63, 20. 4. 1963, p. 1338/63.

(2) OJ No C 77, 19. 3. 1984, p. 11.

(3) OJ No C 35, 9. 2. 1984, p. 12.

(4) OJ No C 98, 20. 8. 1974, p. 1.

(5) OJ No C 193, 20. 7. 1983, p. 2.

Annex

Training-level structure referred to in Article 2 (2)

Level 1

Training providing access to this level: compulsory education and professional initiation.

This professional initiation is acquired at an educational establishment, in an out-of-school training programme, or at the undertaking. The volume of theoretical knowledge and practical capabilities involved is very limited.

This form of training must primarily enable the holder to perform relatively simple work and may be fairly quickly acquired.

Level 2

Training providing access to this level: compulsory education and vocational training (including, in particular, apprenticeships). This level corresponds to a level where the holder is fully qualified to engage in a specific activity, with the capacity to use the instruments and techniques relating thereto.

This activity involves chiefly the performance of work which may be independent within the limits of the relevant techniques.

Level 3

Training providing access to this level: compulsory education and/or vocational training and additional technical training or technical educational training, or other secondary level training.

This form of training involves a greater fund of theoretical knowledge than level 2. Activity involves chiefly technical work which can be performed independently and/or entail executive and coordination duties.

Level 4

Training providing access to this level: secondary training (general or vocational) and post-secondary technical training.

This form of training involves high-level technical training acquired at or outside educational establishments. The resultant qualification covers a higher level of knowledge and of capabilities. It does not generally require mastery of the scientific bases of the various areas concerned. Such capabilities and knowledge make it possible in a generally autonomous or in an independent way to assume design and/or management and/or administrative responsibilities.

Level 5

Training providing access to this level: secondary training (general or vocational) and complete higher training.

This form of training generally leads to an autonomously pursued vocational activity – as an employee or as self-employed person – entailing a mastery of the scientific bases of the occupation. The qualifications required for engaging in a vocational activity may be integrated at these various levels.

Appendix 2: The description format of national classification systems

1. Official data

1. Describe in short the 'history' of the (National) Classification System(s) of vocational standards in operation in your country

   Which interests were taken into account?

   Which aspects of earlier systems were or were not implemented into the system in operation?

2. Which definition of standards do you use?

   What is regarded as a standard in your country, expressed in a possible Format?

   What are the elements of standards (state of the art, relevance for the future)?

   Which types of standards are used (industry standards, enterprise standards, school-based standards) and are you using one ore more standards?

   How to avoid bias (i.e. avoidance of bias and discrimination of the elements, which procedures)?

3. About the definition of the classification system:

   What is described in the classification system by definition and by components?

   What elements are included in the system?

   What is the number of levels which are used?

   What is the definition of the levels used (i.e. the level descriptors)?

   What are the criteria for the allocation of standards to levels?

4. About the scope and binding:

   Does your country have a national classification system or a number of regional classification systems or even branch specific systems?

If your country has specific regional or branch systems, where do they differ from each other?

What is the status of the system (mandatory or not?)

5. What are the official aims and function(s) of Classification System(s) as well as the actual aims and function(s) or aims/functions to be obtained in the near future?

6. Which procedures for the development of standards were followed?

   Which aspects of the procedure are regularised?

   Which aspects are subject of decision making by the people involved?

   Who have to be involved?

   Who should take the initiative to update standards?

   Do you use fixed and formal periods of validity of standards?

   Give a description of formal procedures or the most common procedures step by step.

   Which (standard) bodies are formally recognised for the purpose of developing and maintaining the standards?

7. Describe the procedures for the validation and implementation of standards.

   Does your country have different procedures for the adaptation of standards and the implementation of new standards into the classification system?

   Give a description of the procedure(s) step by step

8. In which way are standards maintained?

   Who is primary responsible?

   What is the period of reviewing the standards (maximum or minimum)?

9. Describe the similarities and differences between the system(s) used in your country with the European 5-level Structure

   Which number of levels?

   Which definition of levels?

   The criteria for allocation

10. What is the way(s) the European 5-level Structure is (still) used in your country in addition to your 'National' system(s) for classification?

2. Case studies

1. Give the description of the procedure for the development of standards as recently executed in two sectors (health care and the construction industry):

   People involved (national-, regional bodies, position, back ground, part in the process, responsibility),

   Procedures step by step

   Time span

   Which aids and appliances, resources and instruments were used

2. Describe the procedure(s) for the validation of standards in these two sectors

3. Describe the assessment of the procedures by people directly involved

   workability of the steps and criteria for classification

   compromises negotiated

   opinion of the quality of the results

   bottle necks and other emerging problems by the implementation

3. Give your personal (expert) opinion about:

1. Positive and negative aspects of the classification system in your country

   procedures and classification criteria included

2. The potentials of the classification system to be used for accreditation of prior learning:

   What should be changed to enhance these potentials?

Appendix 3: Description of ISCED-97 levels, classification criteria and sub-categories

ISCED (old)

The International Standard Classification of Education (ISCED) was designed by UNESCO in the early seventies and adopted in 1978. It was "to serve as an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally". In December 1997, UNESCO agreed on a new ISCED.

The description of the "old" ISCED levels (Eurostat statistics) are:

ISCED 0 (pre-primary education)

Education preceding primary education. In the vast majority of cases, it is not compulsory.

ISCED 1 (primary education)

Begins between the ages of four and seven, is compulsory in all cases and lasts five or six years as a rule.

ISCED 2 (lower secondary education)

Compulsory schooling in all European countries. The end of this level corresponds often to the end of full-time compulsory school.

ISCED 3 (upper secondary education)

Begins around the age of 14 or 15 and refers to either general, technical or vocational education. It may lead to the standard required for admission to higher education or it may be "terminal", as is sometimes the case with vocational education and training.

ISCED 5, 6, 7 (higher education)

ISCED 5 covers programmes which generally do not lead to the awarding of a university degree or equivalent, but admission to this level usually requires the successful completion of a programme at the upper secondary level.

ISCED 6 covers programmes leading to a first university degree or equivalent.

ISCED 7 covers programmes leading to a second, post graduate university degree.

Appendix 4: List of abbreviations

ACAC	The Awdurdof Cwricwlwm ac Asesu Cymru, Wales (Curriculum and Assessment Authority for Wales)
ACOA	AdviesCommissie Onderwijs Arbeidsmarkt (The independent Vocational Education and Labour Market Advisory Committee, the Netherlands)
AES	Acuerdo Económico y Social (Economic and Social Agreement, Spain)
APL	Accreditation of prior learning
BEP	Brevets d'Études Professionnelles (Vocational Studies Certificate, France)
BIBB	Bundesinstitut für Berufsbildung (Federal Institute for Vocational Training, Germany)
CAP	Certificat d'Aptitude Professionnelle (Certificate of vocational aptitude, France)
Catalogue of FPR Qualifications	Syllabus of the Regulated Vocational Training (Spain)
CCEA	Council for the Curriculum, Examinations and Assessment
Cedefop	European Centre for the Development of Vocational Training
CEP	Certificat d'éducation professionnelle (Certificate of vocational education, France)
CEREQ	Centre d'Études et de Recherches sur les Qualifications (Centre for Study and Research on Qualifications, France)
CGFP	Consejo General de la Formación Professional (General Council for Vocational Training, Spain)
CINOP	Centrum voor de Innovatie van Opleidingen (Centre for the Innovation of Education and Training, the Netherlands)
CIREM	Centre d'Iniciatives I Recerques Europees a la Mediterania (Foundation Centre for European Initiatives and Research in the Mediterranean, Spain)
CIRETOQ	Cedefops' Network for Research Cooperation on Trends in Occupations and Qualifications

CPC	Commissions Professionnelles Consultatives (Occupational Professional Advisory Committees, France)
CQP	Certificats de Qualifications Professionnelles (Vocational Qualification Certificates, France)
CTH	Commission Technique d'Homologation des titres et diplômes (Technical Commission for the accreditation of diplomas and certificates, France)
CTP	Catálogo de Títulos Profesionales (Catalogue of all the titles of Regulated Vocational Training, Spain)
DESCO	Direction de l'Enseignement Scolaire (Directorate of Education and Schools, France)
DfEE	Department for Education and Employment (UK)
DUT	Diplômes Universitaires Technologiques (Technical University Diplomas, France)
EU	European Union
EURES	European Employment Services
FPR	Formación Profesional Reglada (Regulated Vocational Training, Spain)
GCSEs	General Certificate of Secondary Education
GNVQ	General National Vocational Qualifications
INEM	Instituto Nacional de Empleo (National Office for Employment, Spain)
ISCED	International Standard Classification of Educational provisions
IUT	Instituts Universitaires de Technologie (University Institutes for Technology, France)
KMK	Ständige Konferenz der Kultusminister der Länder (standing conference of education ministries of the Federal States, Germany)
LOB	Landelijk Orgaan Beroepsonderwijs (National Body for Vocational education, the Netherlands)
MBO	Middelbaar Beroeps Onderwijs (senior secondary vocational education, the Netherlands)
MEC	Ministry of Education and Culture (Spain)

NTO	National Training Organisation
NVQ's	National Vocational Qualifications
OECD	Organisation for Economical and Cultural Development
PCS	Professions et Catégories Socio-Professionnelles (Occupations and Socio-Professional Categories, France)
QCA	Qualifications and Curriculum Authority
RVQ	Review of Vocational Qualifications (England)
SEDOC	Système Européen de diffusion des offres et des demandes d'emploi en compensation internationale (European System for the diffusion of jobs offers and demands in international dimension)
SNC	Sistema Nacional de Cualificaciones (National System of Qualifications, Spain)
SVQ's	Scottish Vocational Qualifications
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VET	Vocational Education and Training

Cedefop (European Centre for the Development of Vocational Training)

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